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ABSTRACT

OPT, a newsletter consisting of a student and a teacher edition, is published monthly during the school year. Emphasis is upon presenting information and materials on current topics of interest for junior and senior high school students. The periodical, announced here on a one time basis, is unique for the following reasons: 1) it is an inquiry-based student instructional periodical with application to a broad range of social science content areas; 2) the major articles are written by social science curriculum developers or high school teachers rather than by staff writers without classroom experience; and 3) the newsletter invites reader reaction through the feedback reply cards and questionnaires. In this issue students apply a cost-benefit analysis system to an urban technology issue, interpret graphic and visual descriptions of predicted urban growth and apply the concepts and data to examine urbanization in their own community, analyze issues of womens rights, learn about future planning careers, examine holography, create alternative futures, and analyze statements of their peers about social groups within the school. For each article, the overview section of the Teachers Guide lists the major discipline orientation, the major concepts, approximate instructional time, summary of suggested student activities, goals, questioning techniques, and follow up activities. Lesson plans with objectives and teaching procedures are also included in the guide. (RM)

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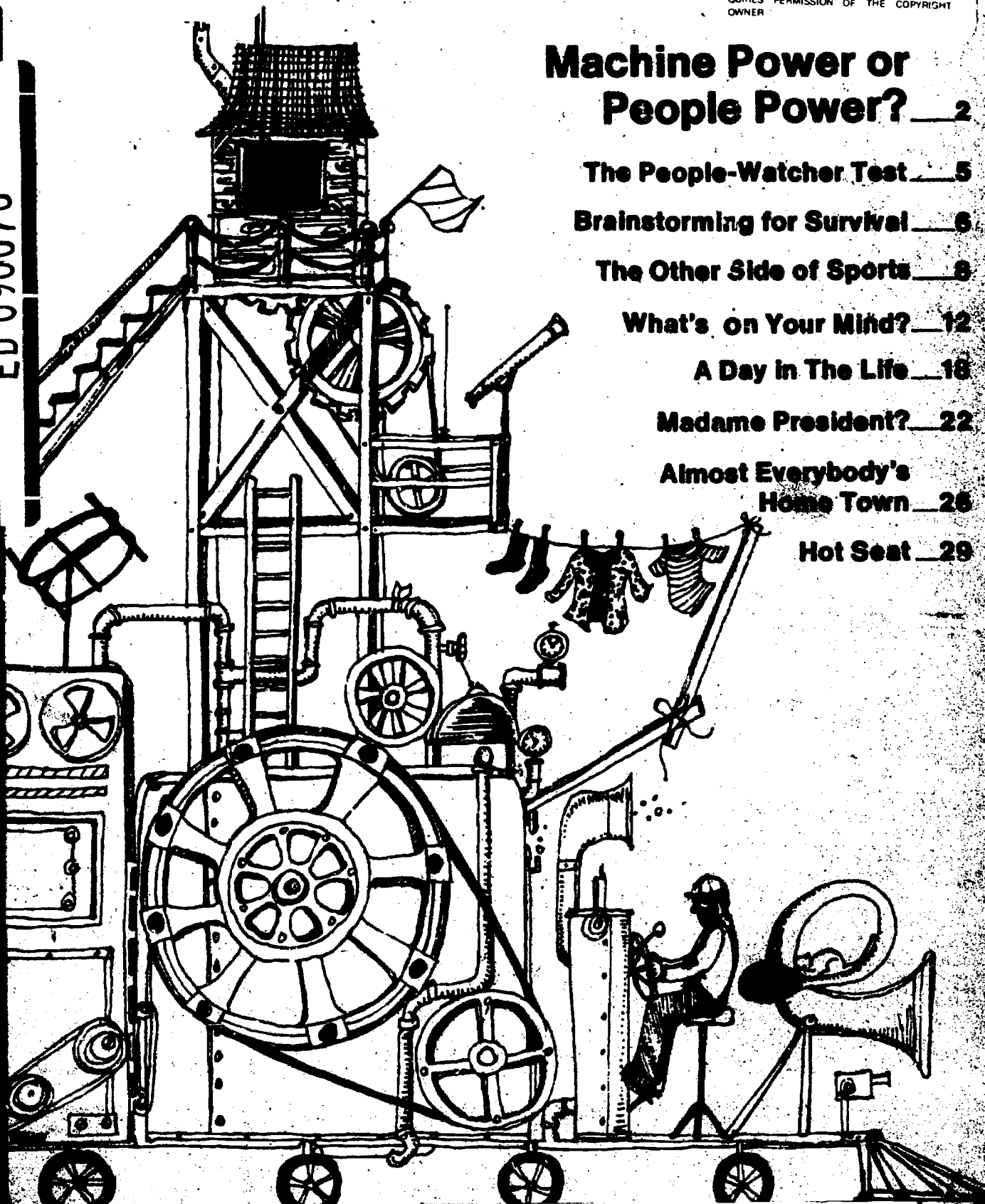
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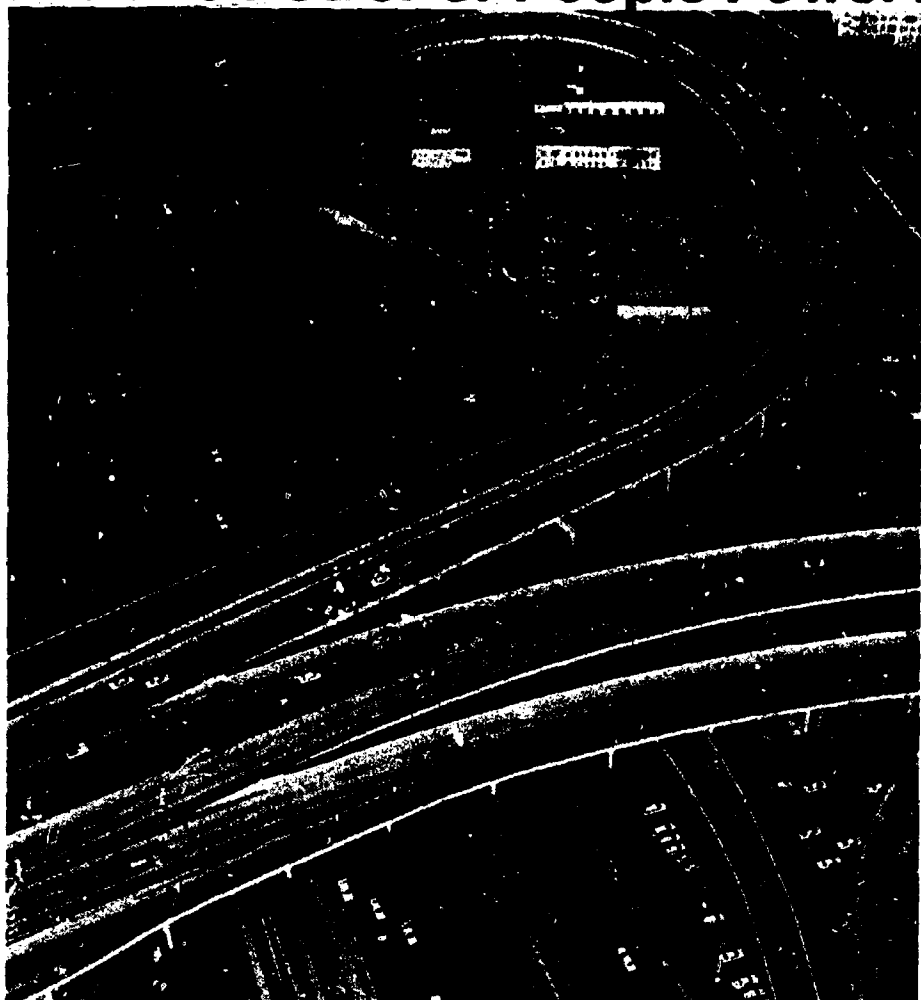
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Machine Power or People Power?



Wide World Photo

(An aerial view of Los Angeles in the 1970's.)

by Judith Fagan Burbank

Have you bought a new gadget, gizmo, or machine lately? A new car, an electric can opener, a tape deck, a trail bike, a transistor? We live in an age of technological marvels, and all of us make the choice to buy pieces of that technology every day. The technological choices we make have a tremendous impact on the way we live. You will see that clearly if you try to imagine how your daily life would be different without cars, or television, or telephones.

Some people believe that our lives are being made for us by technology. They are called *technological determinists*. They believe that machines *make* human history. But no matter how large an effect technology has on the way we live, technology itself is created by human beings. People make choices—to create, buy, and use technology, and the choice comes before the machine.

Every choice that we make involves costs and benefits. The benefits are

usually easy to list. What were the benefits of the last technological choice you made? Fun, leisure, entertainment, excitement? But every choice has its costs as well, to you and to others.

The first cost of a technological choice is clear enough. It is the money you spent. That cost can be counted in dollars. It can also be counted in what are called *opportunity costs*, which is simply a way of thinking about the other things you gave up in order to spend your money on this choice. The opportunity cost of the tape deck you *did* buy may be the new clothes you had to pass up, or the hours you spent working for the money that might have been spent playing sports.

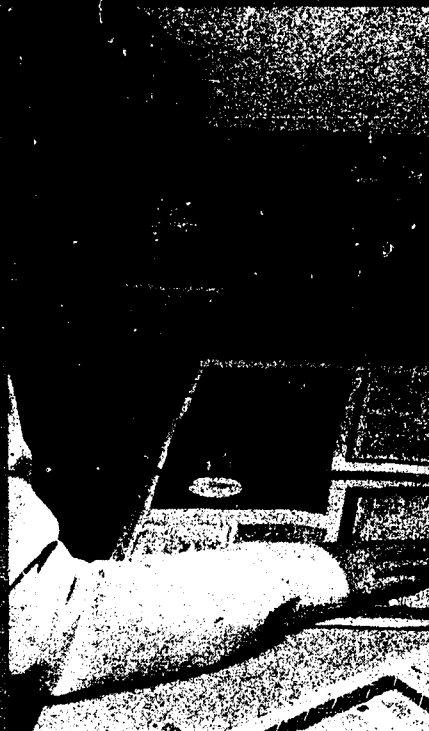
Other costs may take more digging before you are aware of them. If you like to play that new tape deck loud, its noise may be a cost to your parents and your neighbors. The exhaust gases of your car are a cost to the whole community.

OPT

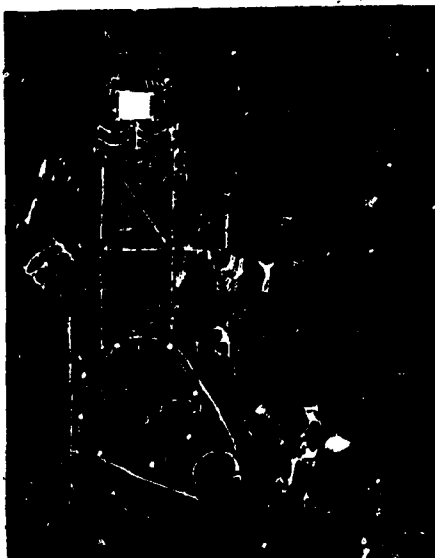
VOL. 6 NO. 16 May 10, 1974

The Magazine On People and Things

TEACHER'S EDITION



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Machine Power or People Power?

Student Edition, p.2

"Machine Power or People Power" is designed to help students evaluate the technological decisions that shape their lives. Students can learn:

1. To analyze choices in terms of costs and benefits;
2. To understand, through the example of Los Angeles, how technological decisions have shaped a way of life;
3. To see how the process called Technology Assessment can help your society to make better technological choices in the future;
4. To practice doing a Technology Assessment on the issue of a mass transit system for Los Angeles;
5. To understand that technological decision-making ought to include the broadest range of citizen participation.

The materials presented include: —"A Personal Exploration" activity to help students begin to think through the costs and benefits of personal technological choices they have made; —information on the process of technological assessment; and —"Doing Technology Assessment," a four-part exercise involving students in making an assessment of choices involved in one technological issue.

Starting Off

Students can begin by doing "A Personal Exploration" on page 3 and discussing choices they have made, including the costs and benefits of their choices. Sometimes it is difficult for students to see the costs, but this is an introductory exercise and is designed to start students thinking in this mode. And the exercise can also be referred to again after the class has worked through the transportation assessment exercise suggested in the article. If this is done, teachers and students may want to refer back to the opening "A Personal Exploration" exercise as a way of evaluating growth in this process of thinking. For example, would students change their own costs and benefits list in any way? Would they add other items they had not thought of before? Would it be more difficult to decide if they had to make the same decision again? If teachers choose to follow this suggestion, they should be sure students hold on to their own original responses to "A Personal Exploration" to use them again.

The assessment of the transportation system contains its own set of instructions for students. You will probably want to have students working in small groups for this exercise and for the final presentation and voting exercise.

Technological Assessment Exercise

One value of the technological assessment exercise is to give students some sense of the complexities of choices involved, as well as some understanding of the realities involved in negotiating and reaching some decisions for actions. This experience can challenge students to use their skills of persuasion, their ability to analyze the arguments of others and their own way of clarifying values and reaching a decision. After all of these exercises, the class may want to return the "Personal Exploration" exercise to discuss in what ways their own thinking has changed.

Judith Fagan Burbank is a Research Developer with the Social Studies Program, Education Development Center, Cambridge, Massachusetts.



The People-Watcher Test Madame President?

Student Edition, pp.5,22

"The People-Watcher Test," on page 5 of the student edition, and "Madame President?" page 22, are designed to be used together. The "test" is meant to be an attention-grabbing introduction to the lesson about change in the political roles of women. The objectives of instruction for "The People-Watcher Test" are to help students:

1. To surface positive and negative attitudes about women in politics.
2. To speculate about why many people have particular negative attitudes about women in political leadership roles.
3. To focus attention on the political roles of women as an aid to reading the lesson on page 22 about women in politics.
4. To arouse student interest in the lesson on page 22 about women in politics.

Procedures

Begin "The People-Watcher Test" lesson by asking students to first read the directions and then to try to match each of the eight pictures with one or more of the items in the "List of Personal Descriptions."

When students have finished this matching exercise, tell them to turn to the "Answer Key," on page 6, and to examine the answers to the "test" and to determine their "people-watcher ratings."

Ask students to tell whether they rated as "poor," "up-and-coming," "good," or "super people-watchers."

You might make a class count for each rating and write the frequencies on the chalkboard.

Next ask students to tell why they responded as they did, both as individuals and as a group. During this discussion stress that the main point of the "test" was not to find out who could match each woman's picture with an exact personal description. Rather the purpose was to determine whether the respondents were willing to match women with political leadership roles. In this way, "The People-Watcher Test" serves as a detector of stereotyped thinking and possible bias against women in politics. It is anticipated that some students will respond in terms of the stereotype of male dominance of political activities. Accordingly, these respondents would be expected to readily match the women with such female sex-typed occupations as nursing, elementary school teaching, and assisting political leaders. It is expected that they would stereotypically match the men with the male sex-typed occupations of political leader and lawyer.

Conclude this discussion by asking students to speculate about answers to these questions:

1. Why might some people be unwilling to match women with political leadership roles?

2. How are attitudes about the political roles of women related to the political roles that women perform in our society?

Following discussion of "The People-Watcher Test," ask students to read "Madame President?" on page 22.

Objectives

The objectives of instruction for the "Madame President?" lesson are to help students:

1. Interpret data presented in graphic form accurately and concisely.

2. Use evidence to make factual judgments about the magnitude and significance of change in the political participation of women.

3. Use evidence to make factual judgments about the magnitude and significance of change in the governmental positions held by women.

4. Use evidence to make factual judgments about the magnitude and significance of change in public opinion about women in politics.

5. Make warranted judgments about the speculations of others concerning the future political roles of women.

6. Evaluate predictions concerning the future of women in politics on the basis of evidence about the past and present.

Begin your discussion of this lesson by making sure students understand how to interpret the graphic data. You may want to ask a comprehension question for each of the tables and charts. Next ask students to state their conclusions about the magnitude and significance of change in these three aspects of women in politics: political participation, positions in government, and public opinion about women's political roles. Require students to support their conclusions with evidence drawn from the lesson in the student edition and other sources, if available.

Conclusions from the Evidence

You may use these as models and work toward similar student statements. Or, you may present one, two, or more of these conclusions as challenge statements and ask students if the data supports them.

1. Female participation in public elections has increased greatly during the last twenty-five years. Today, women participate in public elections as voters about as extensively as males.

2. Women tend to vote independently of their husband's wishes. This is a significant departure from the way it was about twenty-five years ago.

3. Most women do not take part in public political activities other than voting. However, it should be noted that this conclusion applies to males too.

4. Very few women have achieved top positions of decision-making and power in national, state and local politics.

5. A majority of men and women today are willing to vote for qualified female candidates for President and for Congress. This represents a great change from thirty years ago. However, it should be noted that vastly more men and women are willing to vote for a female congressional candidate than for a female presidential candidate. Perhaps many people are still unwilling to trust a woman with the highest position of power.

6. Slightly less than half of the adult females are in favor of organized efforts to strengthen and change women's status in society. However, a majority of these subgroups are in favor of the efforts of women's organizations: single women, black women, college-educated women, and urban and suburban women.

It might be very stimulating to have students speculate about these six conclusions. For example, students should produce a useful and interesting discussion when they consider why less than half of the adult females are in favor of women's groups.

Before leaving this section of the lesson, you might want to poll students in your class concerning their opinions about voting for a woman candidate for President or Congress. You could compare the students' responses with the nationwide responses shown in tables 3 and 4.

Futures

This lesson is concluded with an exercise about the future of women in politics. Ask students to agree or disagree with the four predictions about the political future of women on pages 22 to 25. Require students to support their judgments with evidence, but also help them to realize that differences of opinion about forecasting cannot be settled easily at present. Emphasize that students should be open-minded in considering viable alternative conclusions about the future of women in politics.

Last, ask students to examine their own student political structure in the school. Ask them to consider what connection their own political world has for the future of women in politics.

Following are three books that you and your students might want to explore to learn more about women in politics.

Chamberlain, Hope, *A Minority of Members: Women in the U.S. Congress*, New York: Praeger Publishers, 1973.

Epstein, Cynthia Fuchs, *Woman's Place*, Berkeley: University of California Press, 1970.

New York City Commission on Human Rights, *Women's Role in Contemporary Society*. New York: Avon Books, 1972.

John J. Patrick is Associate Professor of Education and Co-Director of the High School Political Science Curriculum Project at Indiana University.

OPT AT A

MAJOR DISCIPLINE ORIENTATION

Page	Title	History	Geography	Economics	Government	Sociology	Anthropology	Psychology	Technology	Personal Values	MAJOR CONCEPTS	APPROXIMATE INSTRUCTIONAL TIME	SUMMARY OF SUGGESTED STUDENT A
5	People-Watcher Test										Leadership (political) Decision-Making Status Social Change	1-3 Class periods	Students examine their own values by role descriptions. Students interpret graphic material to develop knowledge. Students, based on information they have de
22	Madame President												
29	Hot Seat										Leadership (political) Status	1 Class period	Students read an interview with a woman in office. They use data from this article "President?" to analyze issues of sex-ty maintaining political office.
10	Critical i										Invention Impact of Technology on Culture	1-2 Class periods	Students look at holography as a source. They invent new applications in small groups.
6	The Gameboard										Social Planning Decision-Making	1 Class period	Students create alternative futures for school. They evaluate their predictions as in group discussion.
18	A Day in the Life										Spatial Distribution	1-2 Class periods	Students compare the time and activity in school. They substitute other roles in spaces (auditorium, lavatory) to analyze. They create comparisons with urban spaces.

A GLANCE

LINKS WITH OTHER ARTICLES

Machine Power or People Power
Everybody's Home Town
Madame President?
Hot Seat
Other Ways
Other Side of Sports
Critical I
The Gameboard
What's On Your Mind
A Day in the Life

SUMMARY OF STUDENT ACTIVITIES

SELECTED COGNITIVE AND AFFECTIVE GOALS

QUESTIONS YOU MIGHT POSE TO EVALUATE THIS LESSON

ADDITIONAL FOLLOW-UP ACTIVITY

own values by matching pictures with his interpret graphs, tables, and verbal knowledge. Students evaluate prediction they have developed.

Interpreting graphic and pictorial data. Evaluating predictions. Expressing an opinion about women in politics.

Do students accept the idea that they may stereotype women? Do students interpret data with accuracy? and use it to evaluate predictions?

Students conduct school survey or community poll on women in political roles.

we with a woman who seeks a political from this article and from "Madame issues of sex-typing and gaining and ce.

Analyzing interview data. Examines willingness to respond to the issue.

Can students identify several key issues in their own words? Do students show empathy with the woman who seeks political office?

Students gather additional data about women in politics. They make predictions about success of famous candidates in forthcoming elections.

graphy as a new communications applications as individuals or in

Comprehending verbal information. Synthesizing to produce new applications.

Can students describe the principles behind holography in their own words?

Students investigate building their own holograph (see supplier information).

as futures for selected categories. fictions as individuals or through

Extrapolating from present to future.

Can students provide eight alternatives? Are the alternatives reasonable?

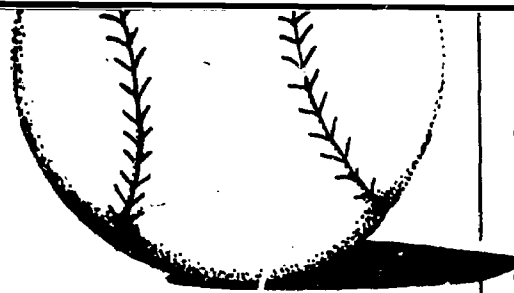
Students replay the alternative futures game using school-related topics.

and activity division in their own other roles (principal) and other ey) to analyze their environment. with urban spaces and roles.

Contrasting spatial arrangements within the school.

Do students comprehend the time-space relationship? Can they apply this kind of analysis to other settings?

Students examine their own school, their home, and their community using the principles in this feature.



- *The Reader's Guide to Periodical Literature* lists numerous articles on holography. A few you might be particularly interested in are:
- *Popular Science*, August, 1969, (describes "Holosigns" used to direct traffic);
- *Science News*, May 10, 1969 (reports on holographic movies);
- *Science Digest*, March, 1971 (describes holographic "picture windows");
- *Popular Science*, April, 1972 (Dr. Gabor reflects on his discovery).

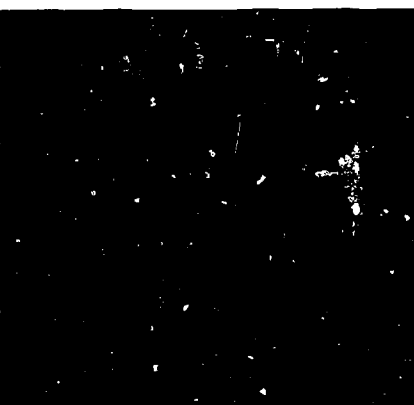
Lasers

After reading the article, your students may have some questions about laser light. You might explain that laser light differs from ordinary light in three important respects: (1) it is *coherent*, i.e., all of the light waves in the beam are in perfect step, unlike regular light waves which vary in length; (2) it maintains a narrow beam over great distances rather than spreading out as it leaves the source; (3) it is monochromatic, having only one color or wave length.

A laser increases the intensity of light by a factor of about one billion. Thus it derives its name from the phrase "light amplification by stimulated emission of radiation."

Your Own Hologram

If you would like a simple 4" x 5" hologram to demonstrate in your classroom, you can order one from Jeff Hall, 50 Hano Street, Allston, Massachusetts 02134. The price is \$10.



Critical i

Student Edition, p. 10

For many students this article may be the introduction to an exciting new medium of communication which is still in its primitive stages. Students interested in learning more about holography use of lasers might enjoy:

and Holography by Winston Kock (eday, 1969)

What's on Your Mind?

Student Edition, p.12

"What's on Your Mind?" is a new monthly feature designed to help students think about and share some of their personal and interpersonal concerns. Subjects will range from friendship and popularity to moving from one

school to another. Through the sharing of ideas and thoughts, we believe that students will learn about specific problems which affect them personally and about how other teenagers view themselves, the nature of their lives as young adults, and hopefully something about the nature of human nature.

For the first issue of "What's on Your Mind?" we chose the topic of teenage cliques. There are several reasons for our decision. As reflected in student discussions in this issue, many teenagers are ambivalent about belonging to "in-groups"; they see the advantages but realize the costs involved—whether the person is an insider, an "in between," or an outsider. Second, the dilemmas posed to the teenager are real. Is his/her individuality threatened by belonging to a tight-knit social group? What responsibility does the insider bear to other teenagers who are excluded from the group? Finally, in exploring teenage cliques, students often raise some fundamental issues: can you outgrow cliques or are they part of the human condition?

Objectives

"Exploring Cliques" has the following learning objectives:

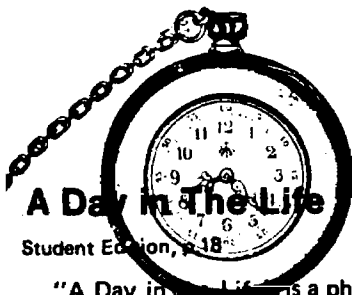
1. Individually or in small groups, students define and assess their own thoughts on cliques.
2. Through reading and discussion, students compare and contrast their views with representative teenagers.
3. By filling out the survey form, students sum up their thoughts about cliques and the value of "What's on Your Mind?" to them personally or as a class.
4. By polling their class, students gain competence in conducting a survey.

Procedure

You may simply ask students to read the material at home and fill out the survey form and return it to OPT. On the other hand, you may wish to take a class period or part of a class period to discuss the issues raised by "Exploring Cliques." If you decide on this course, there are several options for organizing the class. After students have read "Rapping on Cliques," you might ask five students to form a circle (fish bowl) in the center of the classroom to continue the dialogue that the various teenagers were involved in. After ten minutes discussion, the topic could be

opened up to all students. If time permits, each student might then be asked to complete the survey form either at the end of the class or for homework. The next day a poll can be taken by the class, the results tabulated, and then forwarded to OPT.

Richard Dollase is a Project Director of the Social Studies Curriculum Program at the Education Development Center, Cambridge, Massachusetts. Sandra Stevens is a researcher and developer at EDC.



A Day in The Life

Student Edition, p.18

"A Day in The Life" is a photo essay showing the relationships between time, space, and people within a school.

If your students quickly grasp the idea that the use of space, what people do in that space, and the time of day are all interconnected, you might have them examine the use of space in their community.

Ask them to list several areas in their community: business areas, highways, churches, parks, shopping centers. Consider: What kinds of activities are you likely to find in each of these places at different hours of the day? When are they most crowded? When are they deserted? Does this data have any bearing on what city planners do? On what we choose personally to do? On where we choose to live?

You can spend a few minutes as students examine the pictures asking questions of comparison: Does your school follow a similar pattern? How is it different? How efficiently is space used in the school shown on page 18? In your own school?

Ask your students what sorts of activities they might find in various parts of their homes if they photographed them at different times of the day. Is the space in their homes efficiently used?

GEE! Group for Environmental Education, Inc. (1214 Arch Street, Philadelphia, PA 19107) has published the following books:

Our Man-Made Environment, Book 7 by Alan Levy, William B. Chapman, and Richard Saul Wurman; *Man-Made Environment* by Richard Saul Wurman

and John Andrew Gallery; *The Yellow Pages of Learning Resources* edited by Richard Saul Wurman; *The Nature of Recreation* by Richard Saul Wurman; *A Guidebook to Guidebooks* by Richard Saul Wurman, Howard Brunner and Nancy Donovan; *The Process of Choice* by Alan Levy and Stephan Geissbuhler.



Hot Seat

Student Edition, p.29

Mrs. Farenthold's experiences represent one of the hundreds of personal stories which lie behind the charts and tables in "Madame President?" on page 22 of the Student Edition. If you wish to use both articles in class, we suggest

your students first read "Madame President?" and then read the "Hot Seat" interview. Below are some questions you might use to link the two articles.

1. Table 5 on page 25 of the "Madame President?" article identifies education, age, marital status, and residence as significant variables in opinion formation. Using Table 5 as a basis for hypothesis, which of the two congressional districts described below would be more likely to support Mrs. Farenthold in a congressional election? How do you explain your answer?

2. On page 25 of "Madame President?" Bella Abzug and Cynthia Edgar noted some goals of the NWPC. Based on Mrs. Farenthold's experience, what strategies does the NWPC use to achieve these goals? (Does Mrs. Farenthold present any evidence to show that the NWPC is reaching its objectives?) If you made a prediction about the success of the NWPC, would you change your mind now?

3. Did Mrs. Farenthold experience sex-typing barriers? (See page 29.) If you made a prediction on page 25 about sex-typing and negative attitudes, would you change your prediction now?

	District A	District B
Average Age of Voting Population	44.5 years	39.1 years
Married Women†	67.1%	72.5%
Divorced Women†	3.4%	6.1%
Single Women†	8.5%	11.6%
Percent urban of total population	42.6%	94.0%
Average number of school years completed	10.6	13.0

†As a percentage of women 18 years and older
Source: Congressional District Data Book, 1970.

In the first issue of OPT, we requested feedback from students and teachers. Many of the changes you see in our second issue were made on the basis of reader suggestions.

This time we are especially eager to hear from teachers. For this reason, we have provided the questionnaire below. Please fill it out and send it to us with your comments. Please staple the bottom before mailing.

School _____

Teacher _____

Make it bigger _____ smaller _____ it's just right _____

Student Edition _____

• Strongest articles: _____

• Weakest articles: _____

• Reading level: too high _____, too low _____, okay _____

• Features: (Hot Seat, Other Ways, Do It, The Critical I, What's on Your Mind) _____

Interesting and instructional _____, interesting _____, dull _____

• Your students like it _____, don't like it _____

• Suggestions for improvement: _____

Teacher Edition _____

• Helpful _____, not helpful _____

• Suggestions for improvement: _____

• Other comments you'd like to see in future issues: _____

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A Personal Exploration

All choices involve costs and benefits. Here is a personal exploration that will help you consider your own technological choices, and the costs and benefits they involve.

1. What three choices did you or your family make during the last year that involved technology?

- a. _____
- b. _____
- c. _____

2. Now pick *one* of these choices, and list the costs and benefits to you, or your family, and the community, including the environment. For example, if you bought a motorcycle, the costs might include accidents, less walking, noise, etc.

Costs of your choice

Benefits

3. If you had it to do over again, would you make the same decision? Why? _____



In Love with Cars

Some of you may have seen a film called *American Graffiti*. It is a story of how a group of California teenagers in the early 1960's spent the night of their high school graduation. Everything that happens to the people in the film that night has something to do with their most valued possession—their cars. The boys who have cars take their dates to their crowd's hangout, a drive-in restaurant. That drive-in is the center of their social life. *American Graffiti* is a mirror of a whole style of living. It is a life that depended entirely on cars. Owning a car gave these kids things they valued: convenience, status, freedom, mobility, and a feeling of adulthood.

Most Americans value status, freedom, mobility, and convenience. Many find them in their cars. We are a nation that has had a long love affair with the automobile. We have chosen, by the hundreds of millions, to drive cars and to base our way of living on cars. The benefits seemed clear enough when we made that choice. But what are the costs? The city of Los Angeles presents us with an interesting case

The Case of Los Angeles

Nearly seven million people live in the Los Angeles-Long Beach area today. They live in scattered communities, linked together by miles of freeways. The traffic jams on those freeways are enormous. The cars produce a cloud of smog that envelops the city.

Since 1963, the government of Los Angeles has been trying to cope with the problems created by the automobile by raising money to build a mass transit system. The planned system, with 116 miles of track, is estimated to cost \$6.6 billion. But back in 1938, when Los Angeles was not so big, the city had a rail transit system. It was the largest intrastate trolley system in the world, linking together 56 separate cities in the region with 1,164 miles of track. Its smogless, electric-powered trolleys carried 80 million Angelenos a year. When a new company, organized by major manufacturers of cars, gasoline and tires, bought the trolley system, the electric power lines were torn down. The new owners uprooted the railroad tracks and replaced the trolleys with diesel-fueled buses.

Human choices made Los Angeles what it is today. Families chose to buy cars, develop new suburbs, and commute to work. Government chose to build the freeways that hold the suburbs together. Corporations chose to replace an existing rail transportation system with their own products. These choices promoted the values of certain economic and social groups, and not others. These choices benefited some people and harmed others. The situation that Angelenos find themselves in is one which all of us face in the automobile age.

- Were the choices the people of Los Angeles made in the past the wisest ones?
- Which values directed their choice? If Los Angeles had it to do over again, what might it choose to do?
- Is there any way that we can foresee technological cost in the future, in time to prevent technological disasters?
- Is there any way we can guarantee the values of all groups in our society are considered when

technological choices that affect their lives are being made?

Technology Assessment

There are many people, inside government and out, who are trying to do just that—to figure out the costs and benefits of technological choices *before* they are made. The process is called **Technology Assessment**. This process attempts to make the public more aware of the impact of technological change. It tries to predict more accurately the consequences of technological changes, and to broaden the range of values considered in making choices.

In 1967, a congressional subcommittee asked the National Academy of Sciences to study how these objectives of Technology Assessment could be met. One of its recommendations was that both Congress and the President set up independent research agencies to consider all aspects of proposed technological developments.

Congress has already begun to expand its research facilities for doing this kind of work. When Congress passed the Environmental Protection Act, the new law provided that any government agency sponsoring a technological development must submit an impact statement that described the environmental effects of the change. Environmental impact statements were an important part of the debate over the Alaskan pipeline and the SST, the supersonic transport plane.

But an impact statement is only a first step. Once you have some idea of the possible effects of a decision, what do you decide? After you have figured out the costs and benefits, suppose they are different for different groups? Suppose there are conflicts? How do you go about making a decision?

Doing Technological Assessment: A Class Exercise

Should Los Angeles adopt a mass public transportation system?

The present transportation system of Los Angeles depends heavily on the private automobile. One alternative is a mass public transportation system: a system of busses or trains that carries large numbers of people and replaces the private car. The question is: Should Los Angeles adopt a mass transportation system? One way to go about answering this question is to do a technological assessment of the suggestion.

Doing a technological assessment involves several steps;

- Exploring the costs and benefits of the alternative
- Clarifying values of people involved
- Making a personal choice
- Participating in a group decision

Step 1: Exploring the Costs and Benefits

Looking at the costs and benefits of a mass transportation system for Los Angeles begins with a consideration of the groups involved and the possible costs and benefits to them. Following are groups that could be affected by a mass transportation system for Los Angeles.

Choose one group from the list of interest groups below that you would like to work with. It might be interesting to work with a group you are *not* in sympathy with. Once the class has chosen groups, meet together with your group members and brainstorm the costs and benefits you can see for your particular interest group.

POSSIBLE INTEREST GROUPS	COSTS	BENEFITS
1. People who own cars		
2. People who don't own cars		
3. Auto production workers		
4. Highway construction people		
5. California legislators representing people who live in the suburbs		
6. Drive-in theatre owner		

Step 2: Clarifying Values of People Involved

After your group has listed the costs and benefits for the people you represent, try to list all the things you think that group would value most in stating its position. For example, highway construction crews might have "loss of their jobs" as a cost in their column. Would "their jobs" be a value, then, for them? Maybe not; the loss of a job might be outweighed by some benefit they see coming from a mass transit system. So list in order of priority the things you think the group would value. Choose a spokesman who could best represent the position to the class.

Step 3: Making a Personal Choice

A cost-benefits analysis helps you to understand the consequences of technological alternatives. But it does not pro-

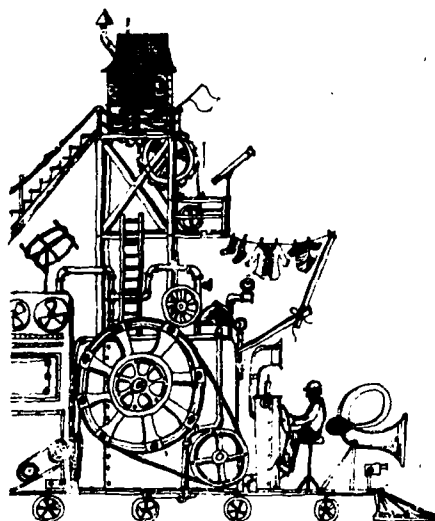
vide a ready-made answer for what a technological choice should be. You will find that for each of the groups, a mass transportation alternative will benefit some, but others will suffer. How do you weigh the interest of one group against the other? Whose values should win out?

After each group has chosen its spokesmen, presentations should be made by representatives of the six groups. The class can act as an assembly. The task of each class member is to listen to the reports, weigh the values of all groups, and decide for himself or herself the choices each would make.

Step 4: Participating in a Group Decision

The final step in this process of technological assessment is the participation of all citizens in the decision-making. To duplicate this process class members will participate as citizens of Los Angeles in voting on the issue. In this voting, each member votes from his own value position as he finally decides for himself.

Should Los Angeles adopt a mass transit system? Where do you stand?



The people-watcher Test

by John J. Patrick

Are you a skillful people-watcher? Can you look at a picture of a man or woman and make an accurate judgment about the kind of person you are observing? Take this test to discover how good you are at guessing what people are like.

Directions

Examine the eight pictures (right) very carefully. Try to match each picture with one or more of the personal descriptions in the following list. Enter the letter of each photograph beside the description you think fits it. When you are finished, turn to the bottom of page 6 to find your people-watcher rating.

List of Personal Descriptions

- 1. Vice-Chairman of the 1972 Democratic National Convention
- 2. President of the National Parent-Teacher Association
- 3. Member of the Armed Services Committee, U.S. House of Representatives
- 4. Professor of Nursing at the University of Colorado and a registered nurse
- 5. A law school graduate and a certified lawyer
- 6. A political leader in Massachusetts
- 7. Teacher at Banneker Elementary School in Gary, Indiana
- 8. A member of the U.S. House of Representatives for 19 years who is one of the more powerful members of Congress
- 9. A leader of the United Auto-workers International Union (UAW)
- 10. Administrative Assistant to the representative to Congress from Massachusetts' 10th District



The Gameboard

BRAINSTORMING FOR SURVIVAL

by Jack Spatafora
New Trier Township Television
Winnetka, Illinois

**"The future of the future
is in the present"***

Many people talk about it . . . many make predictions about it . . . still others make plans for it. Do actual exercises in future predictions make sense? We think so. Consider this: in 2000 A.D. you will be in your forties, you will probably have two children, one house, a mortgage, and the start of an ulcer. In other words, you will have an even larger part in the world of tomorrow than you do right now.

Some of the factors in your life then may include: wall-size three-dimensional television (created by holography?) . . . drugs for fighting fatigue or putting you to sleep instantly . . . robots as workers in factories, offices, even some homes . . . cable television to connect your living room with local shopping centers, school board meetings, little league ball games . . . undersea colonies . . . genetic surgery to alter defects, change personalities.

Maybe some of these predictions won't come to pass. More likely some of these, and many more will!

Survival Kit

The Gameboard in this issue is what you might call your own personal early-warning system or survival kit for a future-shocked age. It's designed to start your thinking about the alternative futures that lie ahead and the choices that you may need to make as the future becomes the present. You may go through it by yourself or with others; there is no scoring and only winners.

Change Areas

The topics below represent areas where great changes might occur, for good or ill. Your mission is to create two possible alternative futures for at

least eight of these. Beside each topic or on a separate sheet of paper indicate in which direction you think these phenomena will be moving between now and the year 2000.

Your alternatives do not have to be opposites. For example, beside the topic "Control of Violence," you might write: "A highly efficient national police force will bring safety to our streets." And "This national police force will put dangerous power into the hands of the Federal government."

Stretch Your Thinking

Stretch your thinking! Don't merely deal in what you *know* to be true, but also in what *may* be true. If you are working with a group, a technique called "brainstorming" developed by professional thinkers may help you.

The idea of brainstorming is to throw out as many ideas as possible. You should list all the suggestions on the chalkboard or on a piece of paper. Do not discuss any of the ideas until the very end. Do not make any comments about any of the ideas—no matter how strange they may be. Do not hesitate to make a "strange" suggestion—what you say may inspire someone else.

The point is to get your minds working at top speed and to try many different approaches. When your group has totally run out of ideas, look back over your suggestions and choose what you consider to be the best two alternatives.

As you brainstorm for your future, remember that if a computer had been asked in 1874 to predict the condition of traffic in 1974, it would probably have decided that the number of horse-drawn vehicles in the world would be so large there would be too much manure in our streets to make them passable.

Option 1

National Police will make streets safe Control of Violence

Option 2

Police will make government too powerful

Brain Research

Radio and Television Programming

Music of the Future

Impact of Computers on Individual's Life

The City and Its Future

Noise Pollution

Mass Transit

Family Life

Women's Place in Society

Men's Place in Society

Leisure Time

Changes in Government

Education in the Future

Religion

Choices

You should now have at least eight alternative futures listed. Surely these futures are not very well described, but at least you've got the idea. In itself this may be a first step toward the year 2000 because it increases your personal awareness of how tomorrow will not necessarily be "more of the same." In many ways it will be a very different world with many different possible roads open before you.

That raises the question of choice. At one time, a child grew up and took his or her place in the same world his or her parents had lived in. This is no longer the case. In many ways your world will be as different from that of your parents as theirs was from that of Julius Caesar. What kinds of differences do you think will happen? Exactly how

would you like your future society to look?

While none of us alone has the power to give final answers to these questions, together we have the ability to shape them. We shape them by the elected officials we put into office . . . by the business practices we allow to influence our society . . . by the money we spend on particular products . . . by the television, films and radio programs we choose to watch and listen to, by the books we read . . . by the leaders we agree to follow.

Block or Score

If we do not invent our future, it will surely invent us! So let's go back to those eight topics and for each one think through either

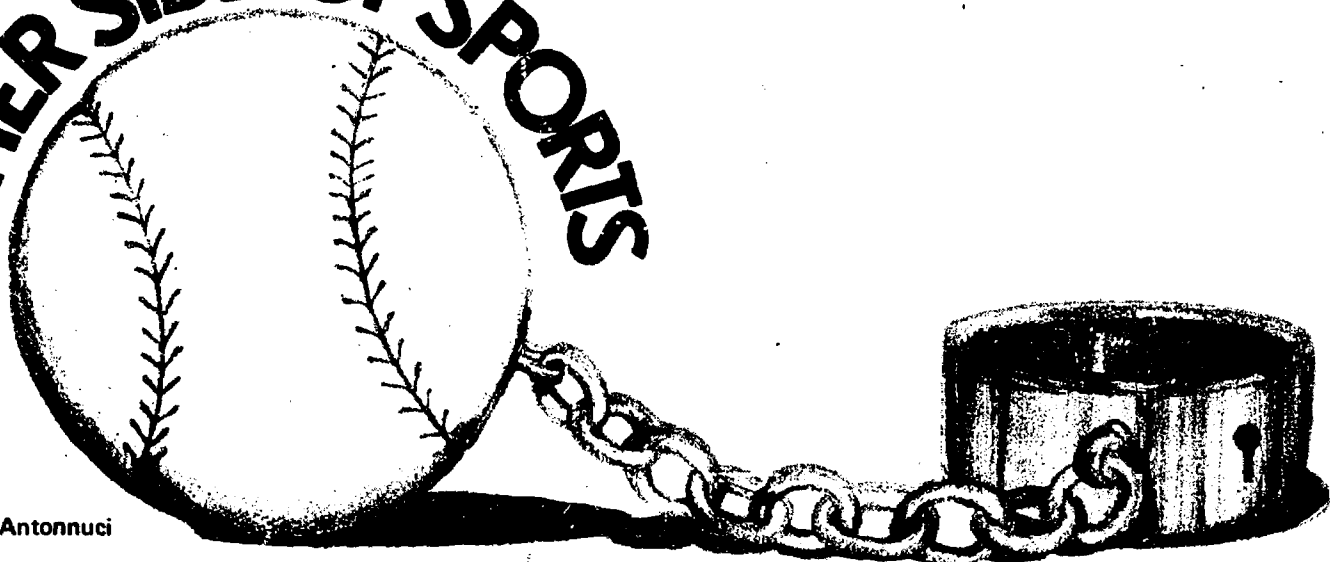
1. some one thing we might do to *gain* a future of our choice; or
2. some one thing we might do to *prevent* a future we do not choose to have.

Once again, you might want to brainstorm these ideas with your group. Write your idea next to the topic.

Does any of this wrestling with choices about our future accomplish anything? Futures planners like James Webber, whose job is described in "Other Ways" on page 15, make use of these sorts of activities in their work. But the real answer to this question is the one that you can provide in your own life between today and that unavoidable tomorrow. Perhaps this little exercise will start you thinking in that direction.

THE OTHER SIDE OF SPORTS

by Mike Antonucci



On January 16, 1970, Curt Flood, a former outfielder for the St. Louis Cardinals, filed suit against the 24 major league clubs which make up the American and National leagues, their respective presidents, and the Commissioner of Baseball. Flood had been traded by his team, the St. Louis Cardinals, to the Philadelphia Phillies.

In a case which reached the Supreme Court, Flood argued that baseball's "reserve clause" was (1) illegal under both federal and state antitrust laws and (2) a violation of his civil rights. He charged that it made him "a piece of property to be bought and sold" and reduced him to the status of slave.

Slavery or Not?

What is the "reserve clause"? What about it prompted Flood to abandon a \$90,000 per year salary to press the issue in court? And why was this complex legal problem—far removed from the excitement of a bases-loaded, ninth inning World Series game—so important to baseball?

When the news media tell us that a player has been sold or traded, they really mean that the player's contract has been sold or traded to a new owner. In order to play in professional baseball, a player must have signed a standard baseball contract. One provision of that contract is the "reserve clause." The clause gives the club which holds the contract exclusive rights to the player's services.

The contract with its reserve clause is just a part of what is sometimes called a "reserve system." This system includes both formal and informal agreements and understandings between club owners not to compete for players. Un-

less his contract is sold or traded by the owners to another club, a player's only alternative to working for that new club is to retire from baseball.

"Reserve Clause"

Paragraph 10, sub-paragraph (a) of the Uniform Player's Contract is the section generally referred to as the "reserve clause." It provides that the club may submit a contract to a player on or before January 15. If the player and the club cannot agree to terms by March 1 of that same year, the club can then—without consulting the player—renew the previous year's contract merely by advising the player in writing within 10 days of March 1. Club management sets the player's new salary. The only restriction the owner faces is that he may not cut the player's earnings by more than 20 percent of his previous year's salary.

Flood and the Major League Baseball Players Association which supported him consider this legal arrangement unfair. It is compounded by a second rule—a real "Catch 22." It prevents a club during the regular season from using a player who has not signed a contract for the current year.

According to Marvin Miller, Executive Director of the Players Association:

This means that a player not in agreement with the terms offered him receives a notice within ten days of March first advising him that he is again under contract under a one year renewal and if he wants to play he must put his signature to that document. . . .

...as long as the club is interested in exercising this option, the player has no say whatsoever in terms of what conditions he plays under, always bearing in mind he has the one alternative: He may decide to find a different way to make a living.

The final blow is the understanding

between club owners not to employ or try to employ any player "reserved" by any other team. Should a team owner rebel and try to hire a player who has broken the reserve clause, other owners will likely try to stop him through legal or economic actions.

Arguments and Counter-arguments

Flood argued that this mutual agreement among baseball's barons gives them almost total control over the baseball job market.

The owners give two main defenses for the reserve system:

(1) *Without the reserve clause, the richest clubs would capture all the best players.* But the players insist the richer clubs would reach a point where it was no longer desirable or profitable to hire more quality players. After a while, new players only increase a team's success slightly.

(2) *Players' salaries would rise unreasonably.* Owners point to the period in baseball's history before the adoption of the "reserve system" as proof. Clubs frequently broke-up under the financial strain of unequal competition and bidding skirmishes.

To this second argument players reply that it was not the "reserve system" which improved baseball's financial situation, but more equal distribution of teams among the major cities. This cut down on competition for an audience.

The players claim the "reserve system" has never guaranteed healthy competition anyway. It did not stop the New York Yankees from winning 15 out of 19 American League pennants from 1946 to 1964.

Antitrust Law and Legal Precedents

One of the chief issues in the Curt Flood case was whether or not the nation's antitrust laws should apply to professional baseball. The Sherman Antitrust Act of 1890 declared illegal any contract, combination, or conspiracy in restraint of interstate and foreign trade or commerce.

The club owners won a major victory in 1922 by a score of 8 to 0 when the United States Supreme Court said that professional baseball was not covered by the antitrust laws. In the case of *Federal Baseball Club of Baltimore v. National League of Professional Baseball Clubs*, the Supreme Court ruled that baseball was neither interstate nor commerce.

Twenty-seven years later, in 1949, a second case arose involving New York Giant's outfielder Danny Gardella. Gardella had jumped to the Mexican League in 1946. When he tried to return from Mexico to play in the United States again, he was blacklisted by organized baseball in this country. In the case of *Gardella v. Chandler*, Gardella sued for \$300,000 in damages because he could not get a job.

Gardella won a notable victory in the Second Circuit Court of Appeals (a step below the Supreme Court). In its opinion, the Court noted that television and radio revenues seemed to make sport interstate commerce. Thus, it would be subject to antitrust laws. But the Commissioner of Baseball, Happy Chandler, quickly settled with Gardella out of court, preventing the case from being passed on to the Supreme Court for review.

In 1953 a case did reach the nation's highest court. The plaintiff was George Toolson, a minor league pitcher in the New York Yankee system. Toolson was declared "ineligible" when he refused to report to Binghamton, the minor league club to which he had been assigned.

The Supreme Court concluded that the 1922 decision must stand because "this business has been left for thirty years to develop, on the understanding that it was not subject to antitrust legislation."

The Court suggested that if reform was needed, it should be done by Congress through legislation. The line score this time was 7 to 2.

A Different Ballgame

Curt Flood filed suit in 1970, and argued that baseball was a

different business than it had been in 1922. The average cost of building a stadium has risen to over \$30 million, almost always financed by city or county tax revenues.

In 1974, over \$40 million in television and radio rights will be paid to baseball for local and national broadcasts of baseball games. The free agent draft has developed, and the number of ballplayers and ballclubs has dramatically increased. Night baseball has become standard. The rules of the game have changed more than once. Black athletes like Flood have entered the sport. The "reserve system" itself was probably the closest thing to what it had been in 1922.

This picture of "Former St. Louis Cardinal Curt Flood stands behind the counter of his restaurant "The Rustic Inn," on the island of Major a. Since leaving baseball, Flood has settled abroad." by AP Wirephoto has been removed for copyright reasons. It's removal does not detract from the usefulness of the document.

Yet Curt Flood lost his suit. The margin in the Supreme Court was the narrowest it had ever been, 5 to 3. In an echo of the '53 decision against Toolson, Associate Justice Harry A. Blackmun in reading the majority opinion said that: "If there is any illogic and inconsistency in all of this, it is an illogic and inconsistency of long-standing that is to be remedied by the Congress and not by this Court."

Era of Arbitration

But Flood's efforts may not have been for naught. Brought on, in part, by the publicity given to the case, baseball entered a new era in 1974—the era of arbitration.

Under this new system, when a player and a club cannot agree to terms, both parties have the option of filing their case with an arbitrator (selected from the National Association of Arbitrators) who decides the issue independently.

A unique feature of the procedure is that player and owner *each* submit a salary figure. The arbitrator, after studying the case, picks one or the other, but nothing in between.

Price or Principle?

Curt Flood never really returned to baseball (despite a brief stint with the Washington Senators, now the Texas Rangers). The idea that he could ever have been a "slave" at the money he was making was frequently made fun of by the press and the public at the time of his case.

Even Judge Irving Ben Cooper of the U.S. District Court for the Southern District of New York, where the case was first heard, pointed out, "the plaintiff is not compelled by law or statute to play baseball." In his opinion Judge Cooper wrote:

The plaintiff's \$90,000 a year salary does not support... his assertion that the reserve clause [assigns] him to a condition of involuntary servitude. For if it did, he would be the highest paid slave in history.

But did the price really have anything to do with the principle? It is a question the Supreme Court did not answer. All we can say with certainty is that Curt Flood's struggle over it deprived us, sooner than necessary, of a gifted athlete who was a delight to watch.

Skull Session

1. What is the central issue?
2. Should baseball be covered in the antitrust laws? Why or why not?
3. Why do some baseball players dislike the reserve clause?
4. No one can play professional baseball without signing a contract. Can you think of any benefits this offers to the players?
5. Suppose in the future some baseball players got together and bought their own team. How would they handle the reserve clause issue?
6. Suppose in the future an employer offered you a contract similar to one in professional baseball. Would you sign it? Why?
7. The article "Machine Power or People Power" page 2, describes the concept of cost-benefits analysis. How would Curt Flood have applied this concept in his own situation? Could you work out a cost-benefits assessment for Curt?

Critical i

As the world changes from "present" into "future," the communications media change as well. The future will regularly focus on the possible communications of the future.



Are you tired of fighting crowds and of living in a cramped city apartment? Well, then, turn on a "picture window" and relax as you gaze over forests and mountains to a distant horizon. If you live in the country and long for a change, you may choose a cityscape—a window giving you a breathtaking glimpse of towering skyscrapers.

These windows are not ordinary pictures, but three-dimensional **holograms**. They are not the fantasies of a science-fiction writer, but devices that already exist.

Holography is an exciting new type of photography which produces a three-dimensional image so convincing that, unless you tried to touch it, you would believe you were looking at an actual object. The term "holography" (from the Greek "holos," meaning "whole"; and "graph," "to write") was coined by Dr. Dennis Gabor, the Nobel-winning physicist who discovered this amazing process.

Accidental Discovery

Dr. Gabor has described his invention as a case of serendipity—it was something he discovered while he actually was looking for something else. In the 1940's, Dr. Gabor was working in England, searching for a way to increase the resolving power (the ability to record fine detail) of an electron microscope. In 1947 he developed a technique which was effective. He realized that if the same technique were applied to light rather than to electrons, the result would be a three-dimensional image.

Ordinary light would not work, however. Thus, it was not until the 1960's, after a special high-intensity light known as the "laser" had been invented, that holography became possible. The first holograms made with lasers were created in 1963 by Emmet N. Leith and Juris Upatneiks, scientists at the University of Michigan.

The Way It Works

How, exactly, does holography work? Diagram A (p 11) shows the basic technique for creating a hologram. As you can see, four elements are essential: the laser which provides a source of light; a mirror; the object to be recorded (in this case, a sphere); and a piece of film which will become the actual hologram.

When you hold an ordinary photo negative to the light, you can easily recognize an image. If you were to hold a hologram up to the light, however, you would see only a blank grayish surface. Diagram B (p 11) shows how the hologram produces an image.

An Unusual Effect

If you move your head up or down, left or right, as you look through a hologram, different parts of the image will come into view. This is an effect known as **parallax**.

You can experience parallax by doing the following simple experiment. Look out a window and study what you see. Try moving your head slightly from side to side or up and down. What happens when you do this? Do different parts of the scene outside come into view? Try focusing on just one object. As you move your head, does the appearance of the object change?

Now study a photograph, perhaps from a textbook or magazine. If you move your head, does anything new come into the picture? The hologram, because it can produce a parallax effect, is much more accurate in reproducing an image than is a photograph.

All in One

The hologram has other unique properties. When a hologram is made, light waves from every part of the object (for example, the sphere in our diagram) strike every part of the film. In a photograph, one part of the film records one part of the object. In holography, however, every part of the hologram contains *all* of the information.

If the hologram is cut into little pieces, each piece will show the same image if a laser light is projected at it. (However, the smaller the piece is, the blurrier the image will be.) This feature makes the hologram an important means of storing information, since holes, scratches, or other damage to the

film will not destroy the image it contains.

One Hologram = An Encyclopedia

A photograph contains just one view of a scene. A single hologram contains thousands of different views. All the information in an encyclopedia could be stored in a single hologram the size of a piece of typing paper. To record the information, the laser light would be aimed at the film at a slightly different angle for each page.



Some Drawbacks

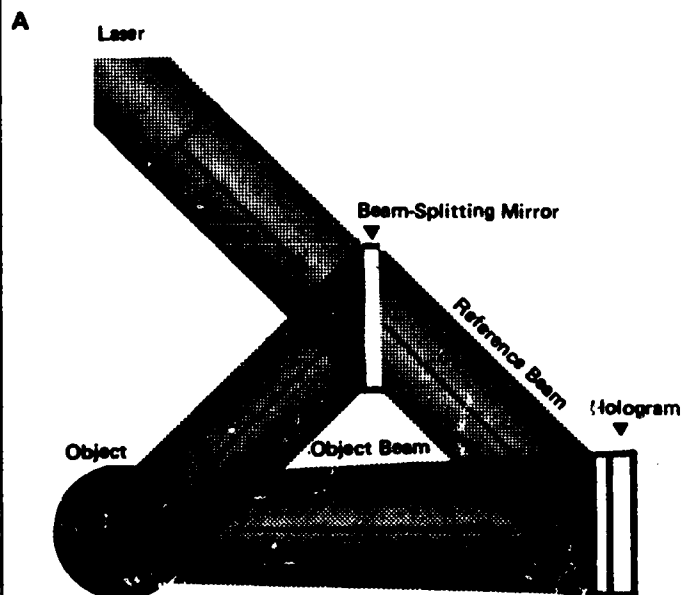
Today, holography is still in a fairly primitive stage. Holograms are expensive to produce. They demand specialized equipment, and the range of subject matter is limited. It is not possible to take images of people or of outdoor scenes, because of problems associated with laser light. The "picture windows" described in the first paragraph really do exist, but the images were made from scale models.

Nevertheless, holography is a growing field. Within the last five years, researchers have completed a short experimental holographic motion picture and built a portable holographic camera.

Future Uses

Three-dimensional television may be a reality in the not-distant future, for scientists already are working on that possibility. "Holosigns," highly visible traffic signs projected in mid-air without a screen were created in 1969. Holograms have been used to scan the distribution of dust and pollution in the air. They have been able to record heat waves normally invisible to the eye.

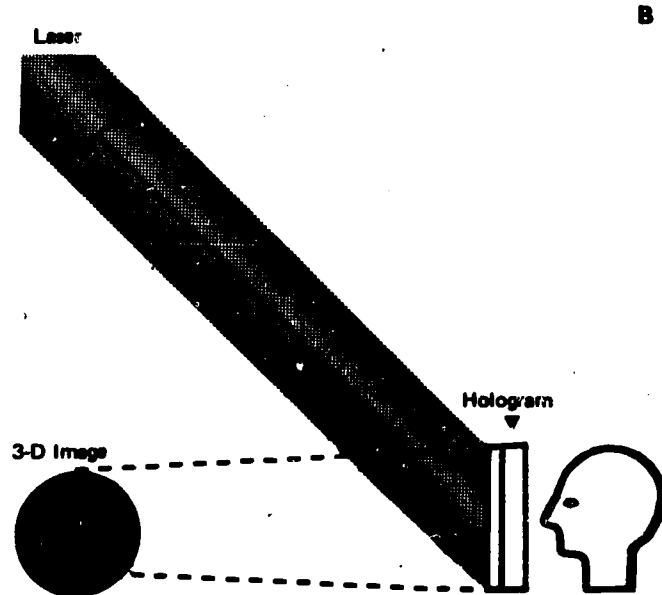
Holography may have important uses in medicine, industry, education and the arts. What uses for holography can you imagine? What seems far-out today may be commonplace tomorrow, for in more than one sense, holography has many dimensions.



Making a Hologram

When the laser beam hits the mirror, half of the light continues as it would through an ordinary piece of glass. This light is called the reference beam. The other half of the light is reflected off the mirror to the object (the sphere) and then reflected again off the sphere to the film. This light is the object beam.

reference beam and the object beam come together as they hit the film. The light waves in each beam interfere with each other as they come together. The film records this special pattern of interference.



Seeing a Hologram

Laser light is directed at the hologram. The interference pattern of the reference and object beams, recorded when the hologram was made, acts on the laser light to reconstruct the light waves reflected by the object. The result is a three-dimensional image of the object which is exactly like the original in every detail, and is so life-like you'd swear it was the real thing!

What's on Your Mind?

by Richard H. Dollase
assisted by Sandra A. Stevens

Social Studies Program, Educational Development Center

With this issue, OPT begins an experiment. We would like to devote a section of this magazine each month to your personal concerns and to provide an opportunity for you to share your thoughts with other young adults across the country.

For this issue we focus on cliques (pronounced cleeks)—those small exclusive groups that exist in almost all schools. Presented here are the views on cliques of some high school students—both urban and suburban, black and white, male and female. You may disagree with what these students say, or maybe you have an entirely different point of view. But we'd like to know your thoughts on this subject and on others that might be presented in this column in future issues.

At the end of this article we have enclosed a survey form for your class to fill out. Send it to us, and we will compile all responses and publish them in October. If you supply us with these survey results, you'll be providing some real insights into concerns that affect you and other young adults like yourself.

Rapping About Cliques

It's really weird, like I don't know about your high school, but at our school there's a lot of pressure put on people, for social friends; there's the great people, there's the in-between people, the freaks. And the great people won't be friendly with anyone else, they just hang around with their certain select group. They won't open it for anyone else.

These are the thoughts of one student who is talking on "Rapping," a radio program run by and for teenagers in Boston, Massachusetts. On this program, students from two suburban high schools participated in a discussion about popularity and getting along with the crowd. Here are their thoughts about cliques and high school life.*

What is a Clique?

Andrea: What is a clique?

Robin: *It's a group of kids and from what I've seen, it depends on how much money your father makes—you're in one clique. You dress a certain way, that's another clique. You wear your hair a certain way, that's another one. It's like a group of people who are all the same. They all have the same ideas and the same friends.*

Do these different groups exist in your school?

Andrea: Is there a difference between a clique and good friends?

Robin: *There is a big difference between a clique and good friends.*

Joanne: *But a group of friends really does turn into a clique. They all have the same ideas.*

Robin: *Well, I've had this group of friends for three years, and we haven't become what I would consider a clique.*

Nancy: *Yeah, but someone else may consider you a clique. Sometimes you don't even realize it. If you're with a group of friends...you could be looked on as a group of friends and you could also be looked on as a clique. You don't even realize that you are being unfair to some people, because you don't talk to them....*

Do you think there's a difference between cliques and a group of good friends?

Andrea: Does your school have a lot of cliques?

Robin: *Yes. You know, it's really tight. Except sometimes you can get into them.*

Andrea: I don't think there's that many.

Robin: *It depends on how you look at your surroundings. I see a lot of kids, they stand around the school together and those are the cliques.*

Are there cliques at your school? How do you tell who's "in"?

Joanne: *When you see those people, do you stereotype them, like if you see a person and they're in this group...*

Nancy: *I don't like to, but sometimes I do.*

Joanne: *I know. You say 'this person's in this group, so this person acts this way.'*

Nancy: *I think most people do.*

Do you expect clique members to behave a certain way?

Andrea: Do you think boys have the same type of cliques as girls?

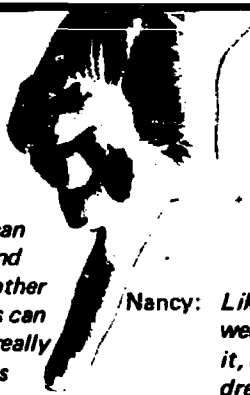
Robin: *Yeah, in a way, they're the same.*

Joanne: *But boys have fewer personal feelings, they're less sensitive than girls. And they don't hurt each other that much. You've heard boys, what they say to each other.*

Robin: *But they don't mean it. Girls are different.*

Nancy: *Girls are vicious.*

*Excerpted from "Rapping," WBZ-FM
The editors would like to thank Radio Station WBZ-FM for permission to reprint the transcript used in the article.



Joanne: *Girls are terrible and sometimes you can really see the contrast between girls and boys. Girls will sometimes hurt each other when they could be best friends. Boys can say, 'Oh, I hate you,' and they don't really mean it. They don't mean it as deep as girls....*

Andrea: *Yeah, girls are more personal about things and have more close friendships.*

Robin: *They're more select about who they share their personal life with.*

Do you agree that boys and girls are different in the way they treat friends?

Andrea: *How early do cliques form?*

Robin: *Most cliques went along from when I went to school in the second or third grade till now. In the seventh and eighth grade, they were pretty powerful. Everyone knew who they were.*

Nancy: *You know what starts it off, too. When I started school, i didn't want to go alone so I had three friends go in near me. And that started it from the beginning of the year to the end of the year. People came in with friends and stayed with those friends 'cause no one really wanted to walk around alone.*

Andrea: *Why do you think it's important to have cliques?*

Joanne: *Maybe for the individual person. Maybe it's important for that person to have the security of a group that will back him or her up.... I mean a lot of people are in there for the security of having a group around them. Of not constantly being alone. Some people just can't take it being alone. Everywhere they go they have to have a member of that clique or someone around.*

Costs and Benefits of Cliques

Andrea: *Do you think that individuality is threatened by group friendship?*

Nancy: *Sometimes. Sometimes a group will do everything together.*

Joanne: *But I like to be an individual and have my own ideas. And sometimes it gets to the point where I have to follow the crowd or else...*

Robin: *If my group of friends doesn't approve of what I'm doing, or where I'm going, or whom I'm going with, I say that's too bad for you. If I happen to like this person, I'm at the point where I'm not going to say 'Oh well, I shouldn't go with her!' I won't follow what 'they' say. I know some people who just do what their friends do, because their friends do it, and they don't want to be different.*

Nancy: *Like I've seen people and if their friends are wearing some type of dress, they will wear it, no matter how bad they look in that dress, they will wear it.*

What might you have to give up to join a clique? What might you gain by being a member?

Nancy: *I think cliques are dangerous. I think they can hurt people.*

Joanne: *They can also be a lot of fun.*

Andrea: *What do you mean?*

Joanne: *It's more fun to hang around with a clique. Most of my good friends are in one clique and we all hang together. It's a lot of fun doing things together and I have other outside friends that are not in any clique.*

Andrea: *Do you find sometimes people who are in a clique pick on one person and make fun of them for no reason at all?*

Nancy: *There's one girl in our school that's been picked on since seventh grade and no one likes her because she's fat and not too good looking, doesn't wear the right clothes. No one will be friends with her, and I bet she's the nicest person. It's too bad because if you don't fit into certain molds or certain groups then you're just left out and you just have a horrible three or four years of high school.*

Have you seen a clique pick on people?

Andrea: *Do you think people outgrow cliques?*

Joanne: *Yes. I really do. People change. People get on different levels.*

Robin: *I think they start new cliques. They change and then get into a new clique.*

Joanne: *Even in adult society there are cliques. There is a group, the debutantes. Now your parents have got to come over on the Mayflower to be in that group. They come to be presented to society in white dresses. I mean society even condones groups. You know, they say you're in a minority group, you're in a majority group, you're this, you're that.*

Robin: *There is always a group. Whether it's in your school, whether it's in society.*

Do you agree with Robin and Joanne? What sorts of groups in adult society do you consider to be cliques? If they are not cliques, what is the difference between cliques and these organizations?

Insider's View

Russell and Bunny were high school seniors when they were interviewed in 1972. Outside of school, Bunny and Russell were members of a group called "The Mob." At that time, the Mob's 20 members felt that their group ties were very significant in their lives. Russell said that there were three requirements for joining the Mob: Mob members must "have respect for each other, listen to each other, and help each other." In the following excerpts, these two teenagers talk about why they were members of "the Mob" and why it was important to them.*

Interviewer: Do you belong to any cliques or clubs in your school?

Russell: *I don't belong to any groups in school, mainly because I don't think they are good enough to belong to, but I belong to a social group outside the school—it's called "the Mob"—that's a group I belong to and that's the name we gave it. So that's a group of people, we get together, we do different things, go different places, do whatever we want, really.*

Interviewer: Parties, and stuff like that?

Russell: *We don't really go in too much for parties; maybe go to concerts, seeing different people who come to town; you know, with the music and different things....*

Interviewer: Do you have some sort of card, or jacket or sweater or something like that?

Russell: *No, this is all very informal.*

Interviewer: Do you ever have any kind of discussions about the way you feel about life or politics or anything?

Russell: *All the time, that's one thing we do better than most teenagers. We get*

into discussions with each other that never end about anything because we are all so close. We've been together for three years now and we're very close so I can go to one member and say 'man, this is killing me,' and we can talk about it and he can tell me what he thinks... A lot of times that will help me out in the long run. And if I'm having a problem with a girl, and the girl is in a mob, I can go to them and they'll give me advice on it. So I gain a lot from them.

Interviewer: Why is "the Mob" important to you?

Bunny: *Because we have unity; we trust one another, and we are able to talk out our problems with each other without our problems being known with everyone. Like there's really...say 20 members in the Mob, and it's really unified because we can talk about things and they won't be said, you know, [outside] the Mob, and the things we do with each other, they stay within the Mob. That's all. You know, that's just it. And there's a lot of people that envy us because we have so many friends and everything...but I guess they really don't know what's going on. I think, like there's only five girls mainly that hang around with the Mob, and the rest are boys. We're all close...like we're a family. ...We each have access...like if we go over to someone's house, we can just expect to feel at home, you know, like if you want something to eat, you'll ask for it, but then the person will probably say, 'Oh, go get it yourself,' you know. And this is how it goes; we're just close.*

How might an outsider see "the Mob"? How would Russell and Bunny analyze the costs and benefits of belonging to a clique?

*Excerpted from *Black in White America: Contemporary Cases*, Vol. 4 (New York: The Macmillan Company, 1974). Copyright © 1974. Education Development Center, Inc.

1. What advantages do you see in cliques? _____

2. What disadvantages or problems do you see in cliques? _____

5. Would you or members of your class be interested in organizing this section for a future class? _____

Your name: _____

School name & address: _____

Other comments you'd like us to hear: _____

Other Ways

A monthly look at some unusual career options

James Webber sits in a bright, modern office, surrounded by white walls, crumpled shelves and stacks of looseleaf notebooks, paperbacks and brochures with titles like *Bahamas Handbook*, *Industrial Planning in France*, *Banking Markets* and *Financial Institutions*. He keeps a pad of graph paper in front of him on his desk. As he uses one of a dozen telephone lines into his office, he doodles lines, curves and diagrams of what he's saying.

Webber is a planner—a partner in the Cambridge Research Institute (CRI), a firm of planning consultants. He spends about nine hours a day working with about 30 secretaries, research assistants and other consultants. Webber has just spent the day talking to the trustees of a city hospital, helping them decide what kind of president they will need when the current president resigns next year.

"Most people start with the man," Webber says. "We always go from the future into the problem." If the hospital plans a big fund drive to raise money to add a new service or a new building, then they will need a glamorous president with fund-raising abilities. If they plan to reshuffle employees to improve hospital organization and cut costs, then they need a person who is good at persuading people to accept changes.

Webber helps the board of the hospital decide what kind of development will be best for them. He shows them where they've been wasting time and money and gives them the best, most recent predictions about medical research and technology.

Webber's career is in a relatively new field—Environmental Analysis—the business of projecting futures and helping companies, schools, hospitals, and other groups plan their own course of development.

Webber has recently worked with a life insurance company concerned that changing attitudes about insurance will affect its future. He has also been a consultant to a paper company trying to decide what to do with an out-of-date building.

Groups like these come to Webber with a specific problem—like getting rid of a product which isn't making money or filling empty classrooms or empty beds. CRI helps a company look at the world and what the world needs.

"We're really educators," he said. "Very often what you really do in planning for an organization is to improve its ability to learn about itself and change. You want to bring the

outside world into the company and then you want to get it into the plans of the company, and then to get organized planning into their plan—that's the hard part," Webber says. "A lot of times a company is just stuck, and they say, 'We don't have much of a future in what we do. How do we get out of this ratty steel business?' We're change agents. We're brought in to transform something."

At other times, companies come to CRI without a specific problem that needs solving, but a general concern about their futures. Recently, Webber has been working with a transportation company that wants to be ready for changes in the future. Webber gives the company "an environmental scanning capability," which he quickly defines as "constructive looking out the window."

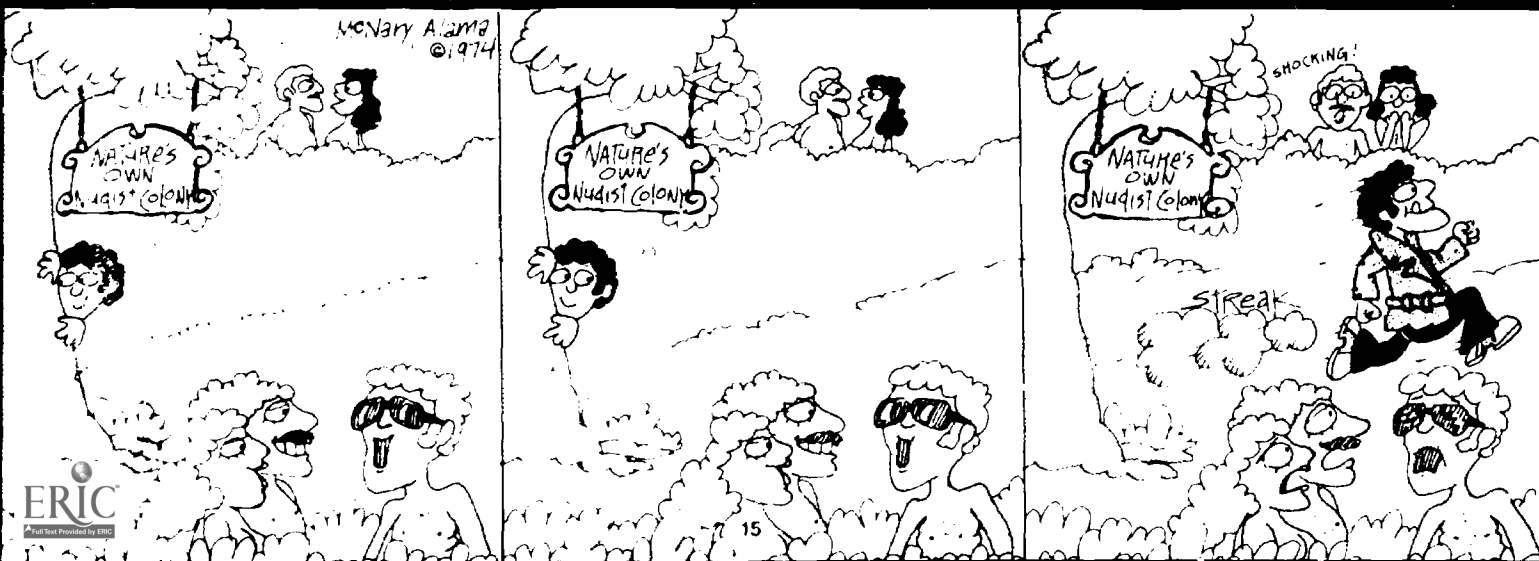
"In the kind of planning we do you really have to be good at lining up facts and figures, but then you also need something else. We call it *high-maze awareness*—the ability to take a jumble of stuff and make some sense out of it."

To be a planning consultant, you need tools of the "hard sciences" like engineering and business math, and you need the "soft stuff" like sociology, psychology, and anthropology, Webber says.

Today technology develops so fast in engineering, chemistry, and physics that half of the knowledge of a specialist in some scientific field may be out of date and useless five years after he finishes college. But if you're a planner, "you're in the knowledge generation business, so it's hard to get out of date," Webber smiles.

Webber is 42. His children are 9, 10, and 12. He figures that by the time they are in college, there will be at least as many future planners—or environmental analysts, as he likes to call them—as there are physicians.

"In environmental analysis, you learn everything there is to know about how you change things. You learn what all these soft sciences have to offer. There are some basic skills that have got to be learned, but look—there are 279 college courses in futures now. It's coming fast. Certainly by the time my children go to college, there'll be future planners' majors." And there'll be places for planners in most major organizations, he says. "The YMCA is planning. The Boy Scouts are planning. Everyone is planning."



This picture by the National Gallery of Art entitled The picture of the month, with the statement, In the 1850's an American artist painted this portrait of the city of the future. Note the tall, windowless buildings in the background. What purpose might they serve? Did the artist see a place for religion in his future city? What evidence is there of a city transportation system? Were rivers clean or polluted? Is this a city you would like to live in?, has been removed for copyright reasons. It's omission does not detract from the usefulness of the document.

A Day in the Life

A set of hourly documentations
of five school people and places
by GEEI Group for Environmental
Education Inc., Philadelphia.

From the forthcoming book,
**Something More You Can Learn
from Your Schoolhouse**,
by Richard Saul Wurman
and Joel Katz,
with Nancy Donovan and Alan Levy
and funded by Educational Facilities
Laboratories, Inc.

Something More You Can Learn From
Your Schoolhouse is a book intended
to stimulate both teachers' and stu-
dents' awareness of the parallels and
analogies between the small environ-
ment of the school building and the
much larger environment of the town
or city where they live. The school is
examined both as a parallel and com-
ponent environment of the city
through chapters dealing with their
essential characteristics and parts:
Spaces and Groups;
Corridor and Street;
The Organization of Spaces;
Levels;
Systems;
The School in the Neighborhood;
Navigating Your Neighborhood;
Yard Use and Land Use.

In addition, there are comparisons
between days in the life of school
people and spaces and city people and
spaces. The margins are also filled with
comments complementing and
expanding upon the points made by
the main text and illustrations, most
of which are photographs. Each chapter
is followed by suggested activities and
exercises. These activities encourage
the use of your school as an active tool
for learning. Examples are drawn and
comparisons made between two
schools, one in center-city Philadelphia
and another in the suburb of Wayne,
20 miles to the west. Both schools are
shown in the selections from "A Day
in the Life of People" and "A Day in
the Life of Spaces" reprinted here.

7am

Student



Teacher



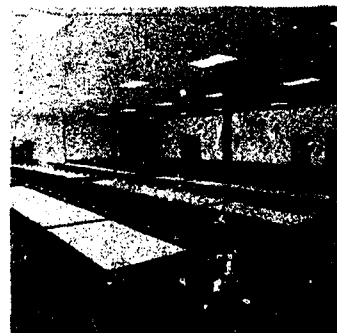
Custodian



Corridor



Cafeteria



8



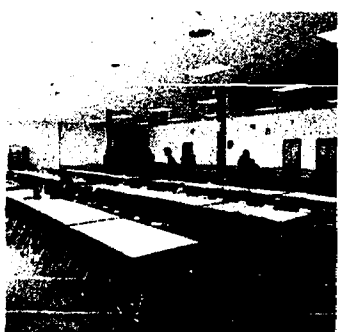
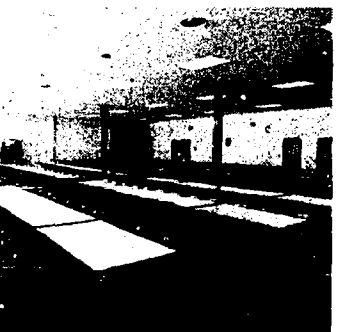
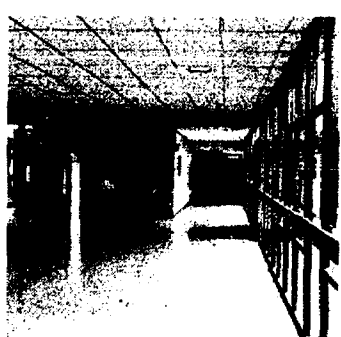
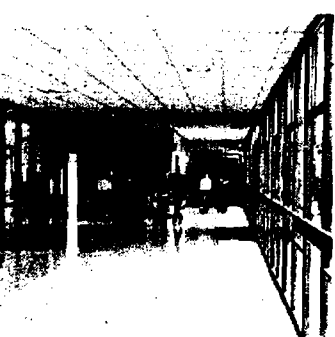
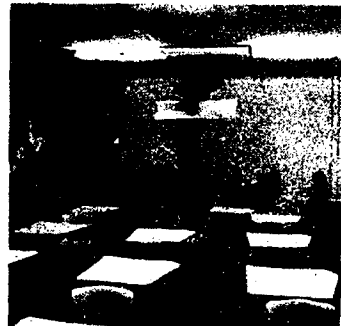
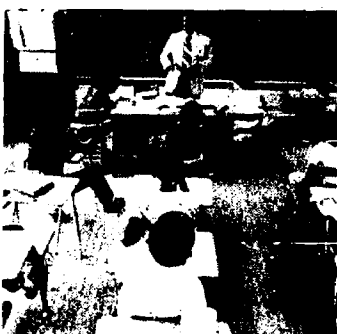
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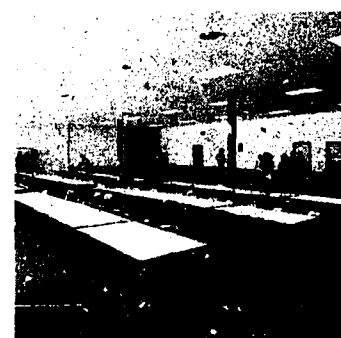
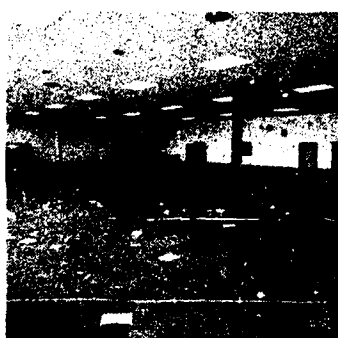
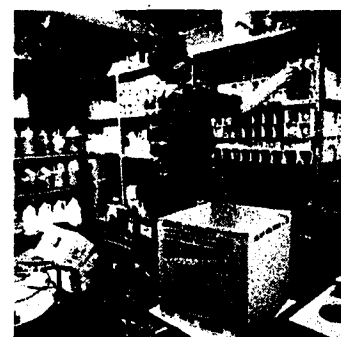
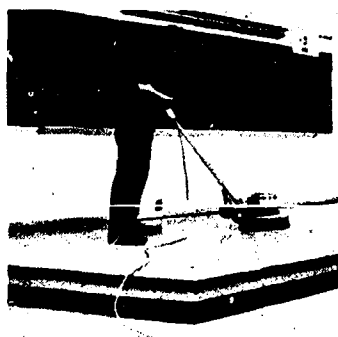
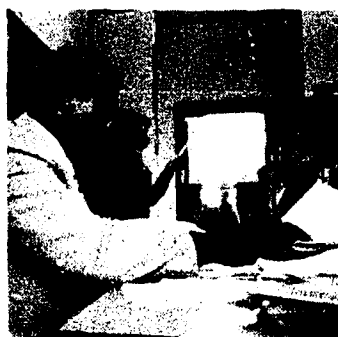
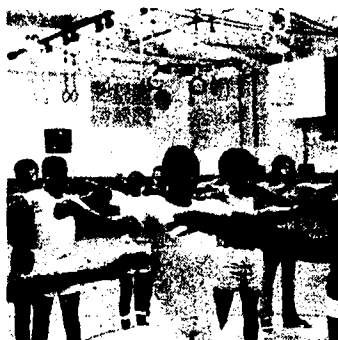
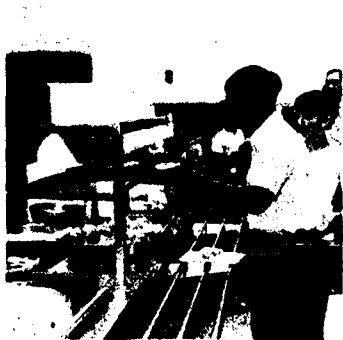


12noon

1pm

2

3





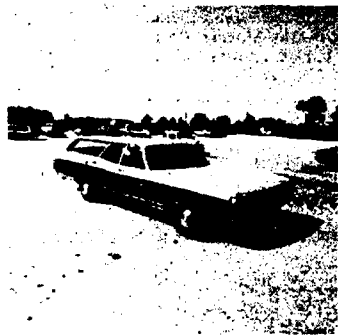
Student

Like most students, this student's day at school is lived in accordance with his class schedule. His schedule keeps him moving about the school through its vertical and horizontal connections—stairways and corridors—from class to class and activity to activity. From your own class schedule and a plan of your school, you can observe a day in your own life by plotting points at hourly or half-hourly intervals.



Teacher

Teachers live their school day in response to a schedule, too, but they use the school in a very different way than their students: while students travel from class to class and room to room, teachers usually stay in one place—their classrooms—where they teach a variety of class groups and usually a variety of subjects. The teacher moves around and through the school for lunch, meetings and special activities. Their desks often are their lockers, and they are almost always right by them.



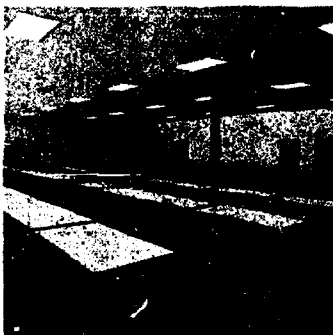
Custodian

The custodian probably sees more of the school in his working day than anyone else: inside areas; outside areas; areas seen and used by teachers, students, the nurse, dietician, administrators and their secretaries; and areas reserved for custodial use alone—janitorial closets, equipment sheds, and other school building services such as its electrical system. Some of his day is in response to a routine schedule of maintenance, but some of his time must always be reserved for him to respond to demands of the moment.



Corridor

As the classrooms are clearing, the corridors are filling. For five minutes every hour, they are filled with hurrying students going from class to class, to the auditorium, playground or cafeteria, often with a stop in between at their lockers. Although only infrequently used, the corridor establishes everyone's movement pattern and reflects the organization and educational philosophy of the school itself. Maybe you can think of ways to use the corridor in your school for more time each day and for a wider range of activities, making it more efficient.



Cafeteria

School cafeterias are used only during lunch periods—continuously for one "period" a day rather than for seven or eight brief bursts throughout the day like the corridor. You should be able to find a great many spaces in your own neighborhood—as well as in your school—that could be used by more people for a greater part of the day and for a wider variety of uses. Using our environment more efficiently is one of the pressing challenges facing us today.



by John J. Patrick

Women have been the real "silent majority" in American politics. Although they make up over 52 percent of the national population, they have held less than 2 percent of the major public offices.

An important part of the American way has been to exclude females from the center ring of the political arena. Thus Congresswoman Bella Abzug and her assistant, Cynthia Edgar, have declared bitterly: "For most of this country's history, women's place has been in the home, in the fields, in the factories, in the sweetshops, or any place except where power is."^{*} And Congresswoman Shirley Chisholm has complained that "I've suffered worse discrimination as a woman than as a black."^{**}

Your responses to the "People-Watcher Test" on page 6 might have reflected the time-honored belief that the important positions in the political game are for men. For example, if you matched the roles of political leadership only with the male pictures, then you might have been revealing a prejudice you have against women in politics.

In recent years many people have challenged traditional female roles. The Congresswomen shown in the "People-Watcher Test" are prime examples of a new type of feminine political leader. The National Women's Political Caucus (NWPC), to which these Congresswomen belong, has been especially active in encouraging females to run for public office and to participate more fully in politics. Other women's groups have been wholeheartedly working for basic reform of women's place in society.

^{*}Lee R. Edwards, Mary Heath and Lisa Basken, editors, *Woman: An Issue*. Boston: Little, Brown and Company, 1972, p. 17.

^{**}Hope Chamberlain, *A Minority of Members: Women in the U.S. Congress*. New York: Praeger Publishers, Inc., 1973, p. 324.

Have Reformers Been Effective?

Some observers believe so. Gloria Steinem, one of the leaders of the women's movement, claims that "women are changing more rapidly than any other group."^{***} Pollster Louis Harris contends that "there are many signs that women are playing for keeps in politics more than any time in the past."^{****}

What Are Your Views?

Following is evidence that can help you decide how much change has taken place in the political behavior of women. Does the evidence support your beliefs? Or does it force you to think new thoughts and to form new conclusions?

Do Women Participate?

Participation in various political activities is one important indicator of change in women's political behavior. Americans have tended to believe that women are *not* very active in politics. There has been much evidence for this

^{***}Gloria Steinem, "Women Voters Can't Be Trusted," *MS.*, Vol. 1, No. 1, July, 1972.
^{****}*Ibid.*

conclusion. In their first presidential election, in 1920, only about one-third of the eligible females bothered to vote. Twenty-eight years later, in the presidential election of 1948, less than one-half of the eligible females went to the polls. How about today? Have women become more active in politics? Have they become as involved as men in campaigning, voting, and assuming political duties between elections?

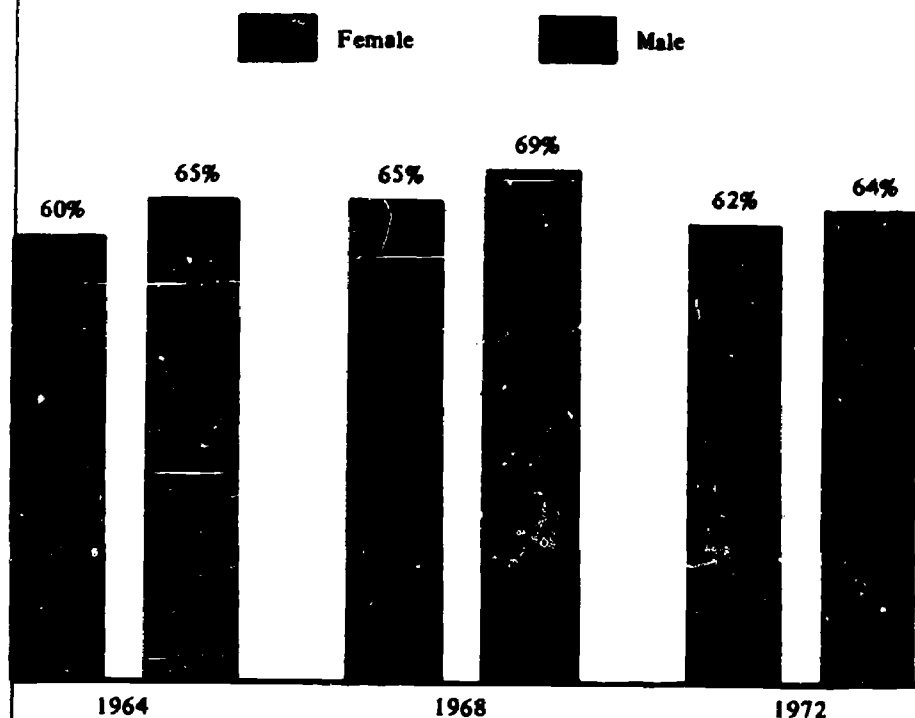
Table 1 shows data about the participation of eligible males and females in the last three presidential elections. What does this data indicate about change in the political behavior of women? How do women compare with men as voters?

Among upper-income, well-educated people living in urban or suburban areas, women are as active as their male counterparts in electoral politics. However, among lower-income, less educated groups, females still tend to be less involved politically.

According to a recent nationwide poll by Louis Harris and Carolyn Setlow, despite the fact that three of every five women believed that they

TABLE 1

Participation in Three Presidential Elections



Source: U.S. Department of Commerce, Bureau of the Census.

should become more active politically, only one in six women reported that they were involved regularly in political activities. "The women questioned were ... looking to 'other women' to take their part. ... They felt that becoming 'really active in politics' meant neglecting husbands and children; they resented being given 'the dirty work' in politics; and one in four believed men in politics were actively keeping women out."*

Do Women Make Up Their Own Minds?

The Harris-Setlow poll shattered the long-standing belief that women vote as their husbands tell them. Sixty-four percent of the women polled said that they decide how to vote independently of their husbands. Sixty percent of the husbands agreed. Louis Harris claims that "women's liberation" in voting is a departure from other times when "it was not uncommon for the poll taker to ring a doorbell and have the woman of the house say she could not honestly tell whom she was voting for, because her husband had not yet given her the word."**

*Gloria Steinem, op. cit.

**Louis Harris, *The Anguish of Change*, New York: W.W. Norton and Company, Inc., 1973, p. 85.

Using participation as an indicator, what does the preceding evidence say about change in the political roles of American women?

How Many Women Hold Office?

Very few women have held high public office in America. Not until 1917 was a woman (Jeannette Rankin of Montana) elected to a seat in Congress. Since 1917, only 84 more women have made it to Capitol Hill, 11 as senators and 74 as members of the House of Representatives. There have been no female Presidents or Supreme Court Justices.

What does Table 2 show about the representation of women in Congress today?

Today, females hold over one-third of the federal civil service jobs, but they occupy only 4 percent of the highest level policy-making positions. Only two women have been members of a presidential cabinet in the 185-year history of the U.S. government. There are no women cabinet members today.

On the state and local levels, women have served as state governors only three times. There are no female governors today and only a tiny number of women mayors.

Very few women, past or present, have even been candidates for public office. But this trend may be changing. According to the National Women's Political Caucus, more than 3,000 females are running for state and national government offices in 1974. This is more than three times as many as the previous high of 1,028 women who sought such positions in government in 1972.***

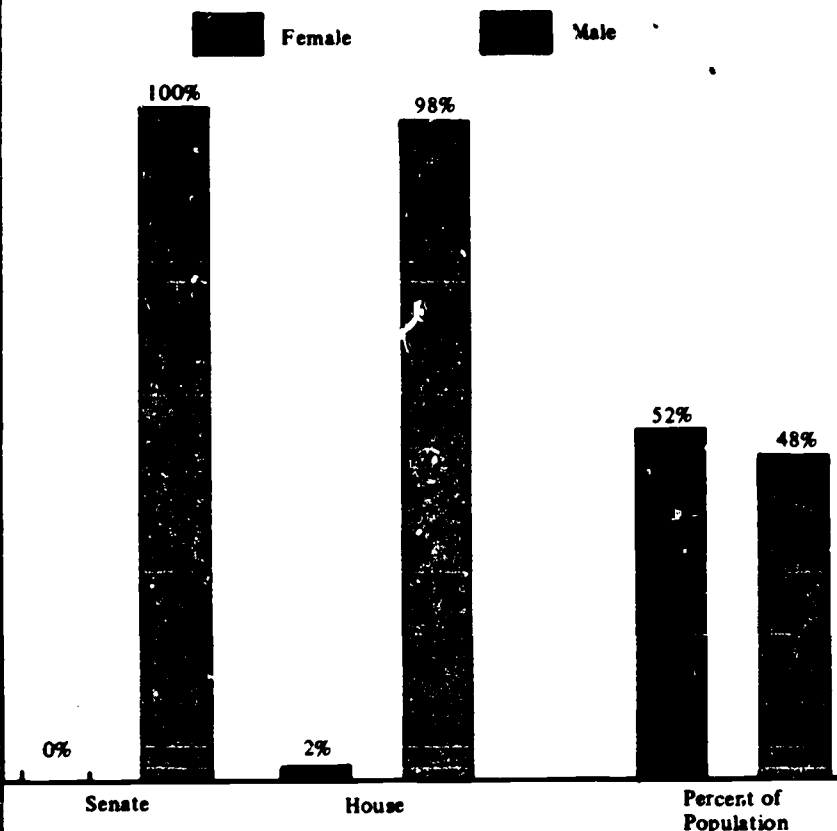
Using positions in government as an indicator, how much change has there been in the political roles of women?

What Does the Public Think?

Public opinion polls are useful indicators of the national mood. They tell what most people think is good or bad, right or wrong. Thus, public opinion about women in politics may be a very useful barometer of change in the status and power of women.

***Herald-Telephone, Bloomington, Indiana, February 14, 1974.

TABLE 2 Proportion of Men and Women in the 93rd Congress



Source: The Almanac of American Politics, 1974.

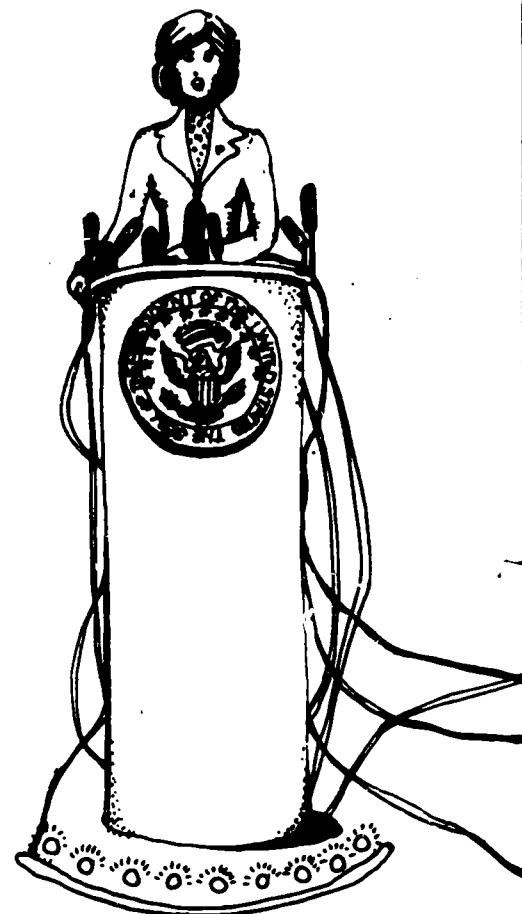


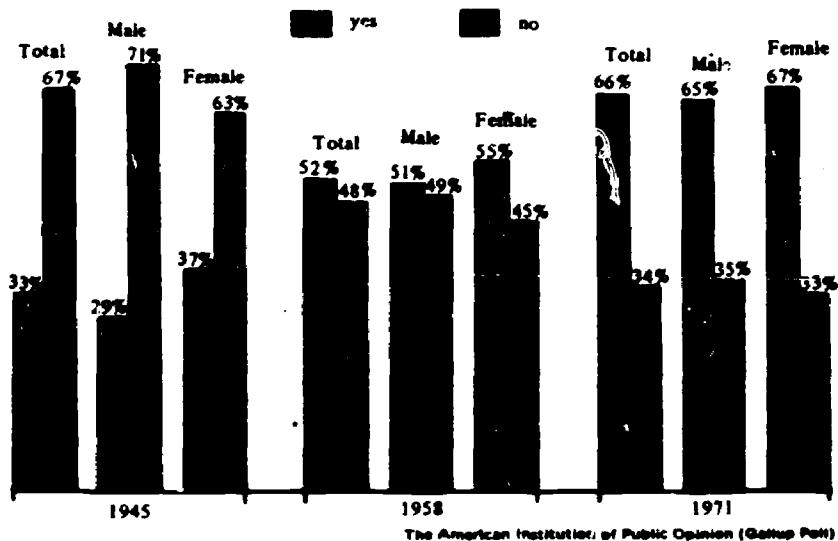
Table 3 shows the results of several nationwide polls, from 1945-1971. People were asked if they would vote for a female presidential candidate. What does this table tell about the potential for change in the political roles of women?

Notice in Table 3 the big difference from 1945 to 1971 in favorable opinions about a female presidential candidate.

- How many voters said in 1945 that they would be willing to support a qualified female presidential candidate?
- How many were opposed?
- How many were willing to vote for an able woman in 1971? How many said no?
- Why and how do you think this change came about?
- What is the significance of this shift in opinion?

TABLE 3

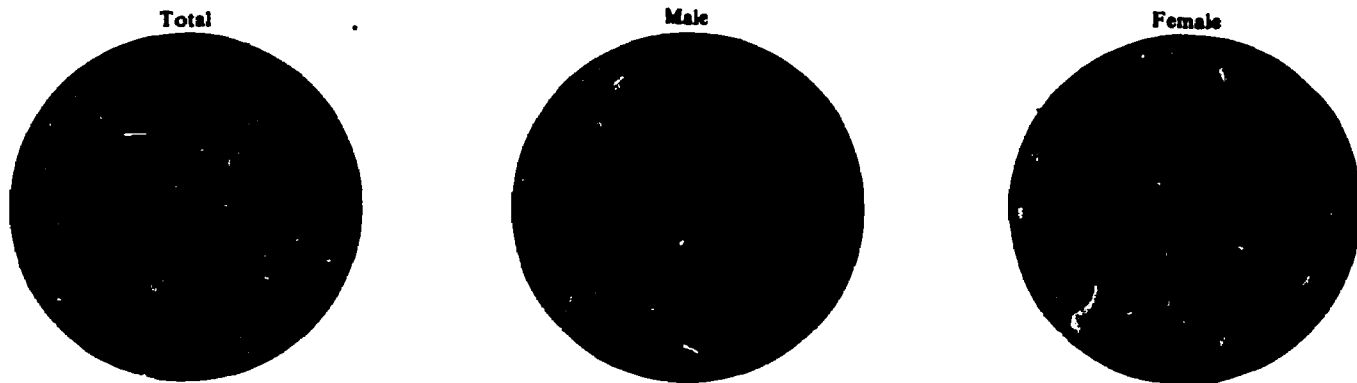
Question— If your party nominated a woman for president, would you vote for her if she was qualified for the job?



- How many women were opposed to a female candidate for President in 1945? How many men?
- Which group shifted the most?
- Why do you believe this was so?

TABLE 4

Question— If your party nominated a woman to run for Congress from your district, would you vote for her if she were qualified for the job?



Source: The American Institution of Public Opinion (Gallup Poll).

Would You Put a Woman in Congress?

Table 4 shows opinions about voting for a female candidate for Congress. What do these figures show about the possibilities for changes in female political roles?

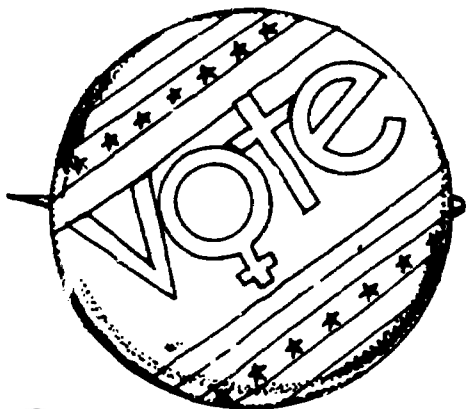
- How many voters were willing in 1971 to cast a ballot for a qualified female Congressional candidate?
- Contrast this with the data in Table 3 which describes willingness to vote for a woman for President. How would you explain this difference?

- Are more females and males willing to elect a woman to Congress or to the Presidency?

What does this difference suggest about change in the political opportunities of American women?

Table 5 presents several variables which show types of women who favor or do not favor change.

- Which category of marital status supports a change in women's status in society?
- Is race a significant factor?



- Does the amount of education a woman has make a difference?
- What trend can you spot regarding age groups and attitude towards women's status?
- Does place of residence indicate a preference towards the role of women in American society?

Now that you've examined these five tables, what do they suggest about the future of women in politics?

The Future of Women in Politics

The preceding evidence about women in politics suggests that significant change may be in the air. Public opinion has become more favorable toward females in political roles and the number of women voters has increased. However, this evidence also shows that few women have reached top positions in national, state, or local government. Furthermore, while supporting the idea of female political participation, only one in six women said that they have done anything other than vote in public elections.

Are there clues in this evidence (and in other data from other sources) about the future of women in American politics? If so, what are they? What predictions might be made about the future political roles of women?

Following are several predictions about the future of women in politics. Which do you agree with and why?

1. Although a majority of men and women say they would vote for a qualified female presidential candidate, most observers doubt that a woman *could* be elected President in the near future. A recent Louis Harris poll revealed that only 37 percent of the female respondents believed that a woman *could* become President within the next 10 years.

I agree _____
I disagree _____
Here are my reasons _____

2. A main objective of the NWPC is to elect over 250 women to Congress in the near future. According to Bella Abzug and Cynthia Edgar, the goal of the Caucus is to elect "... a Congress more truly representative, better prepared to deal with the complex problems which beset our society, and unlikely to tolerate laws and procedures

TABLE 5 Efforts to Strengthen and Change Women's Status in Society (1972)

Group	Favor %	Oppose %	Not Sure %
Women Nationwide	48	36	16
Single	67	20	13
Married	46	38	16
Divorced, separated	57	29	14
Widowed	40	40	20
Black	62	22	16
White	45	39	16
Age 18-29	56	30	14
30-39	49	36	15
40-49	42	41	17
50 and over	41	40	19
Eighth grade	42	34	24
High School	43	40	17
College	57	32	11
Cities	52	31	17
Suburbs	51	35	14
Towns	44	38	18
Rural	40	43	17

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which now discriminate against women, the poor, the young, and any under-represented minority."

Before you answer this question, you might want to read the "Hot Seat" interview on page 29.

I agree with the NWCP's goals _____
I disagree _____
I think the goals can be achieved _____
American (will, will not) elect 250 women to Congress in my lifetime _____

3. Many occupations in American society are sex-typed. That is, most people believe that particular occupations are strictly for men and that others are fit only for women. For example, nursing, teaching kindergarten or first grade, and housekeeping are thought of as women's jobs. On the other hand, law, engineering, and politics are thought of as men's work.

Sex-typing of occupations can be a barrier to the success of women in politics. For example, when Florence Allen, Chief Justice of the U.S. Court of Appeals (Sixth District), was first appointed a federal judge, she met with strong resistance from her fellow male judges. For a long time they would not speak to her, or even look at her, unless required to by legal business. Judge Allen overcame this resistance, but many less strong-willed people might have quit.

*Edwards, Heath, and Baskin, Op. Cit., p. 22.

Some observers claim that sex-typing will continue to limit the roles of women in politics. Others argue that basic attitudes about the roles of women and men are changing rapidly and that sex-typing of occupations will not limit the future political roles of women.

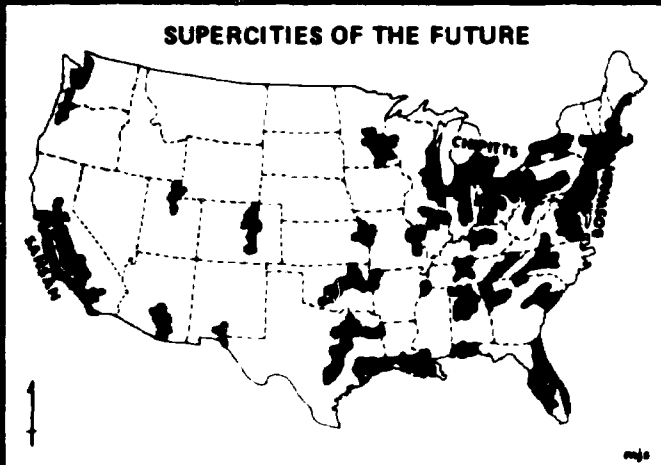
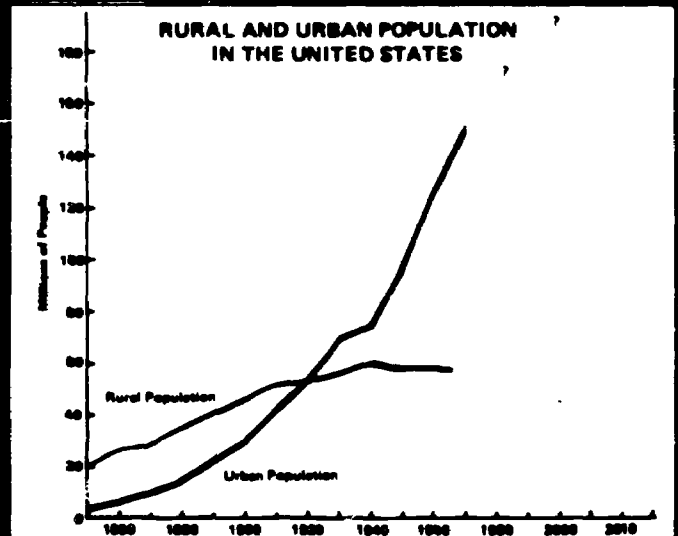
Negative attitudes about women in politics (will, will not) decrease in my lifetime

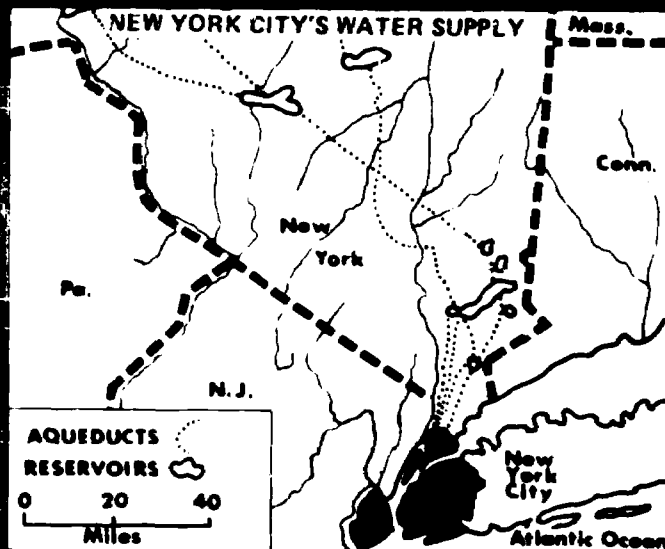
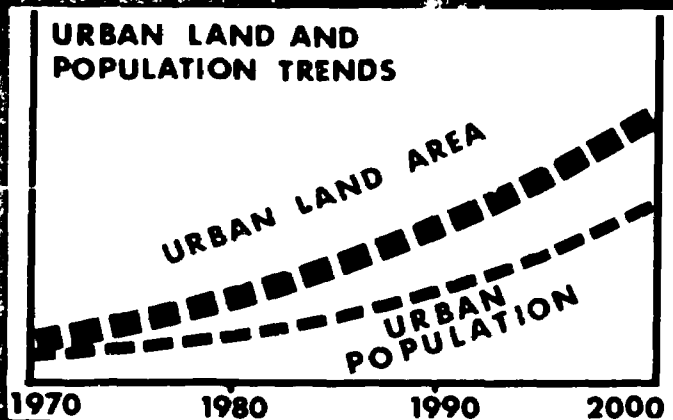
My reasons for this conclusion are _____

Within your school, do more males or females hold student political offices? In what ways does the political data about your school support or deny the data on women in politics presented here?

You will have much to say about the political roles of women in the future—you will be voting! Do you share the visions of Abzug and Edgar about the bright future of women in politics?



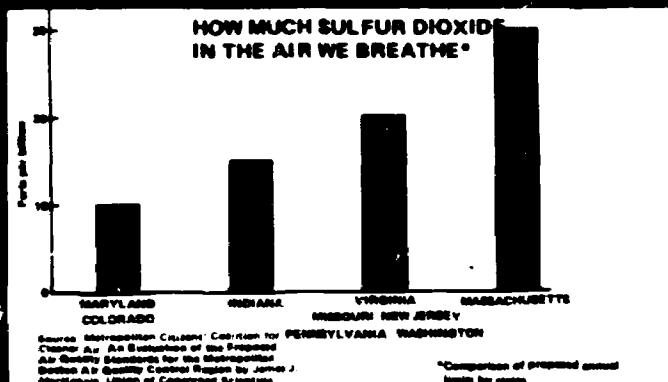




L.A. Invaded by Foreign Smog

A nearby county insists it's cheaper to burn than bury its garbage

Officials in the neighboring county have determined that incineration is the cheapest means of garbage disposal for their community. L.A. residents fear a return to the smog levels in the 1970's before the air quality improvement program began in the city.



New Yorkers Choke on Water

Upstate New York town's waste finds its way into city water supply

A town along one of the many streams supplying New York City with its drinking water has run out of landfill and has begun dumping its waste near a stream that supplies New York with its drinking water.



Barth J. Fellenberg

"Sissy" Farenthold, chairperson for the National Women's Political Caucus (NWPC), and possible candidate for governor of Texas, tells what it's like for a woman in politics

An Interview with Sissy Farenthold

by Jo Ann Levine
Staff Correspondent of the
Christian Science Monitor

"When I first ran for the Texas Legislature, I sort of stumbled along. I didn't know about . . . anything," said Mrs. Farenthold [stating] that it [doesn't have] to happen to other women.

[Now] the National Women's Political Caucus has become the [mapmaker] of the women's movement and is rapidly [gathering] the kind of campaign know-how traditionally held by men. As chairperson of the caucus, Mrs. Farenthold notes that the national as well as state caucuses are helping to chart campaign strategies for the increasing number of women in the United States who are running for public office.

Mrs. Farenthold first ran for the House of Representatives in 1968, was narrowly defeated in the Democratic . . . primary [for governor] in 1972, and now is faced with the decision of whether to run again.

Mrs. Farenthold has four children and is married to businessman George Farenthold. She lives in Houston. . . .

After noting that the women's caucus has proclaimed 1974 as "The Year of the Woman," she considered some of the reasons.

Less Alone

First, she noted, there is a lessened

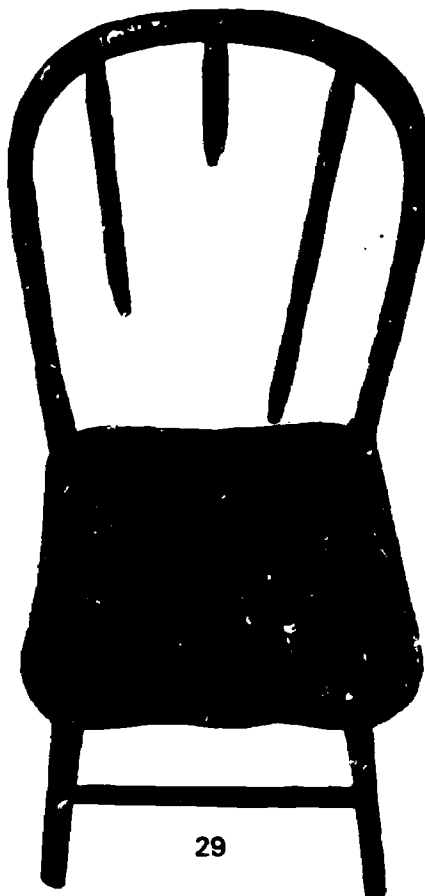
sense of isolation for the woman who decides to run for public office because there are more women with campaign experience to help her. The NWPC office in Washington, for example, will put a woman interested in carvassing [seeking support in a district] in touch with a woman nearby who knows all about carvassing.

She noted that this year there will be women running for the U.S. Senate, for high state positions, and "at least 35 women will be running for Congress."

Still A Disgrace

The percentage of women in public office is still a disgrace 54 years after [women won the right to vote], Mrs. Farenthold said. "In the past," she added, "when somebody wanted to talk about women in public office, they would say, 'Oh yes, we have a woman in the House, a woman in the Senate'—as if we could point to one woman here and one woman there as representing 52 percent of the population. We were so conditioned, we didn't even look at the figures! . . . We don't even have basic information about women in public office in this country."

Hot Seat



"I do think there is a greater acceptance of women in politics," she conceded. "If you start looking, women are all around. But take Texas now: There is not just one woman in the House of Representatives, as there was during my two terms, there are six women."

"What I want to see is more and more women in public office, and I am working for the day when that won't even be a consideration."

She said that it is possible that some women may choose to run solely on a platform of women's issues. "I know from my own case," she said, "I would never do that—there are just too many other things."

No One Speaks for the Powerless

Recalling that when she was first in the State Legislature, she noticed not only the total neglect of issues affecting women, but also the neglect of children's issues. "And what it finally gets to is even broader than that: it is that the powerless do not have any spokespeople.

"What we've had in this country is that those people who have not had the power have not been considered and that's not limited to women. Take the whole energy issue—our government has been an [arm] of the oil and gas industry. I guess the [supporters] of solar energy didn't have much power with the federal government.

"I noticed the other day that just the cost of the environmental impact statements for nuclear plants was more than the total amount [of money the government had given for] solar research in 1972. So, I don't just mean the powerless among the sexes or among the races, but economically, too."

Past Experiences

She then recalled some of the experiences that led her into the 'women's movement. ("I will not use the phrase, 'women's lib.' I loathe it. I think it has [come to have a negative connotation].") . . .)

Mrs. Farenthold said that ignorance [filled] even the women's [colleges]. "There I was at Vassar. . . . We got in there; we graduated; we went to graduate school. . . .

"It wasn't even until I started debating on the equal rights amendment that I even briefed myself on cases based on

continued on page 30

discrimination based on sex. . . . I didn't have one case of discrimination based on sex in my constitutional law class at Vassar, or at the University of Texas Law School. I mean, it wasn't even discussed. . . ."

In the early 1960's Mrs. Farenthold took a job as legal aid director in Corpus Christi. "I was promoted to \$750 a month and when our office expanded, I needed a staff person. We found a man who wouldn't come in for under \$750. That meant that the two of us were paid the same. I didn't [envy] him the \$750, but I had the responsibility. The board

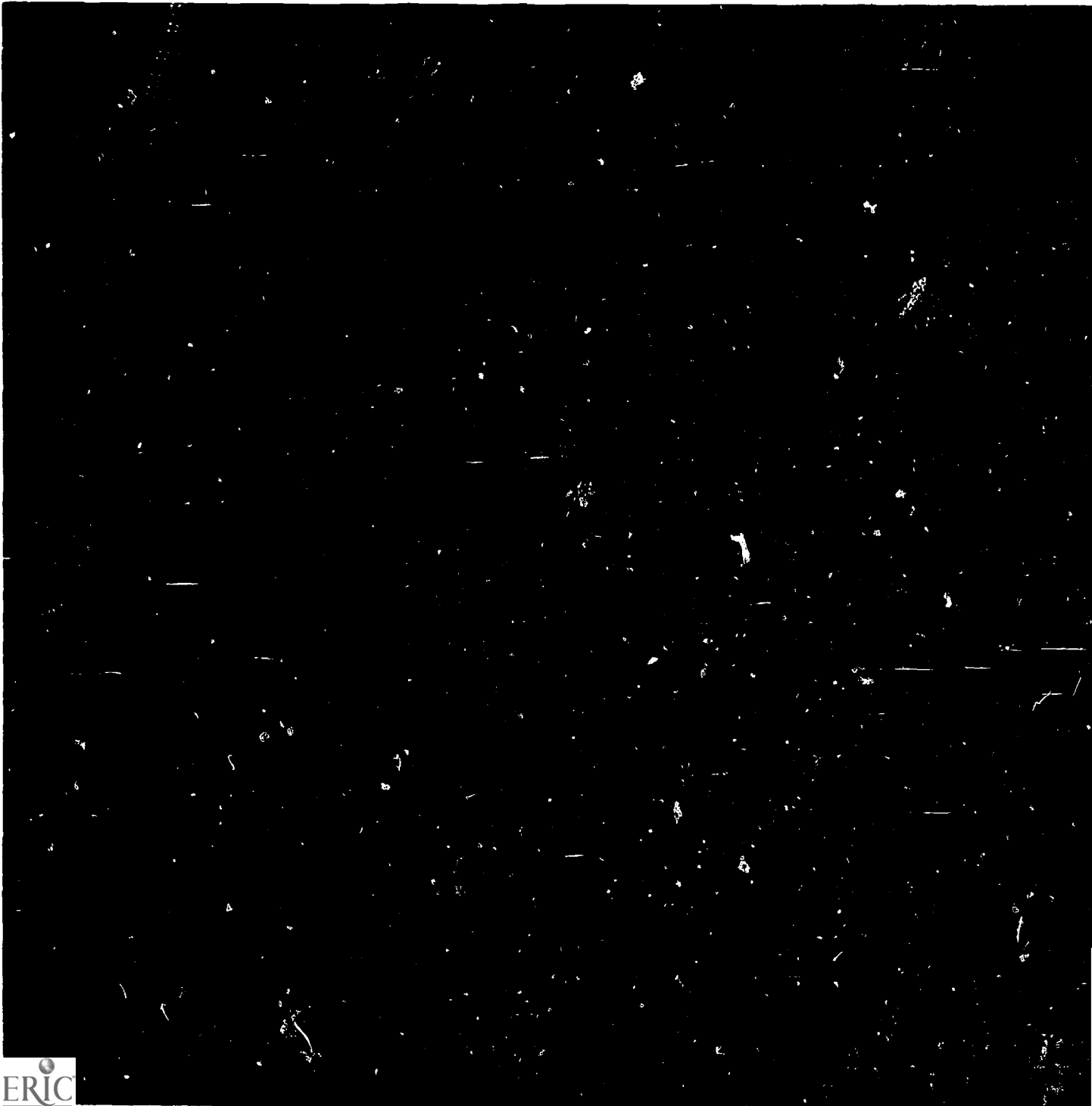
of directors were my friends, and they never thought anything about it, and I was really hurt. But I thought, well, what is it that is the matter with me?

"Today, I wouldn't think that, because we know that traditionally there has not been equal pay for equal work. But not knowing that, even then, I thought, here is just one miserable, isolated, incident. . . . This is where there has been a change. . . ."

Even with all the increase in . . . knowledge on how to run campaigns, doesn't a woman who really wants to be

successful have to wait until a group of men chooses her to run?

"If you do, you'll never run," Mrs. Farenthold replied. "At least from my own experience, you wouldn't. Whether or not to run has a lot to do with self-image, how much pressure you can take, how much negativism you can take. But I would still be answering telephones back in a county campaign office had I just not gotten in and run for the Legislature. I've never been urged. If I had a conviction, I went on and did it."



Networks

The inexpensive freebie classifieds

These ads were chosen for student interest from a number of publications. The editors cannot be certain of the continued availability or the prices of some of the commercial publications listed here. This is not paid advertising.

Futures

Where are we heading...towards utopia or a science-fiction nightmare? Organizations in some states are concerned about the year 2000. Is your state among them? If so, write and find out what steps are being taken to save the future. If not, any of these organizations can send you information about what they are doing. Why not start one in your state? Don't wait for the older folks to do it. You're the one who's got to live there.

Arizona: The Arizona Trade-Off Model. Contact Mr. Charles Minshall, Batele Columbus Laboratories, 505 King Avenue, Columbus, Ohio 43210.

California Tomorrow. Mr. John Abbott, Monadorock Building, 681 Market Street, San Francisco, California 94105.

Goals for Georgia. Governor's Mansion, Atlanta, Georgia 30303.

Hawaii Commission on the Year 2000. Mr. George Chaplin, The Honolulu Advertiser, P.O. Box 3110, Honolulu, Hawaii 96802.

Iowa Future Society. Dean Zener, C-108 East Hall, University of Iowa, Iowa City, Iowa 52242.

What does the future hold for the Pine Tree State? A Maine Manifold suggests an economic future plan for the people of Maine. Send 10¢ for a copy to The Alagash Group, 52 Front Street, Bath, Maine 04530.

Massachusetts Tomorrow, 145 Hanover Street, Boston, Massachusetts 02108.

New Jersey. Human Potential in the Year 2000. Mr. Robert B. Weber, Department of Education, 225 West State St., P.O. Box 2109, Trenton, New Jersey 08625.

Northwest Environmental Communication Network, Robert E. Stilger, Room 373, Lincoln Hall, Portland State University, Portland, Oregon 97207.

Rhode Island 2000. Thomas Carleton, P.O. Box 120, Annex Station, Providence, Rhode Island 02901.

Vermont Tomorrow, 26 State Street, Montpelier, Vermont 05602.

Washington 2000. Prof. S.C. Dodd, University of Washington, Department of Sociology, Seattle, Washington 98122.

And if you're really thinking big... get information about the **World Future Society**, P.D. Box 30369, Bethesda Branch, Washington, D.C. 20014.

Hobbies

Confuse your friends, amuse yourself. Card Tricks for Beginners can be ordered from the Institute of Recreational Mathematics, S-3 Draper Meadow, Blacksburg, Virginia 24060.

Interested in an imaginative art, an absorbing hobby? Complete Decoupage instructions available for \$1. Send a self-addressed stamped envelope to New York Magazine, Box 540, 207 East 32nd St., New York, N.Y. 10016.

Create your own color and light show. Getting Started in Stained Glass is an introduction to a timeless art. Available for 50¢ from Whittemore, Box 2065-3X, Hanover, Massachusetts 02339.

All the stars are not in the sky. For 95¢ and 50¢ postage you can obtain a Japanese Star Shell from the Dover Scientific Co., Box 6011, Long Island City, New York 11106.

For the patient chess player, here's a chance to challenge new partners, by mail. For information write to: Chessnuts, 25-H Mount Vernon, Saugus, Mass. 01906.

Community

Let your fingers do the walking through all the resources of a city. The **Yellow Pages of Learning Resources** edited by Richard Saul Wurman outlines many of the opportunities for learning hidden in your town. \$1.95 from M.I.T. Press, Cambridge, Massachusetts 02139.

This land is your land. Get to know its wonders. The **Learning Tribe** offers a year of community living, travel and study in North America (Nova Scotia, Mexico, Appalachia) for people aged 16-18. For information write to: The Learning Tribe, Box 57, Fitzwilliam, New Hampshire 03447.

Another country, another family, and another way of life. Inquire about a summer abroad from: **Experiment in International Living**, 110 Kipling Road, Brattleboro, Vermont 05301.

Want some credit for living? The **College Level Examination Program**, Box 2500, Princeton, New Jersey, has information on earning up to two years of college credit for your life experience.

Jobs

There's still time to get it together. **Summer Jobs in Federal Agencies** could help you make your summer plans. Free from U.S. Civil Service Commission, Washington, D.C. 20415.

And here's a question June graduates might want answered. **Who's Hiring Who?** by Richard Lathrop is a directory of employers. Order from: **Who's Hiring Who**, Box 3651, Washington, D.C. 20007.

Investigate a career in an X-ray-ted field. The **American Registry of Radiologic Technologists**, 1600 Wayzata Boulevard, Minneapolis, Minnesota has information on this important area of medical technology.

10ERS

Opt Networks
Guth and Company
191 Spring Street
Lexington, Mass.
02173

DO IT

The regular "how-to" section

Want a living room in your bedroom?
Going away to college next year?
Getting your own apartment after graduation?

Make a sofa.

1. Materials: an old mattress or sheet of foam rubber, a strap of leather, and fabric.

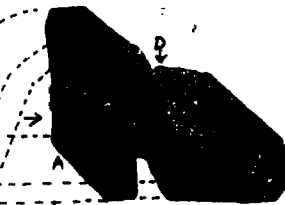


2. Cover mattress with a colorful sheet or fabric of your choice. Lay mattress over material and trace around it to make a pattern. Cut two. Cut a long strip the length and depth of mattress sides. Sew pieces together to form a cover.

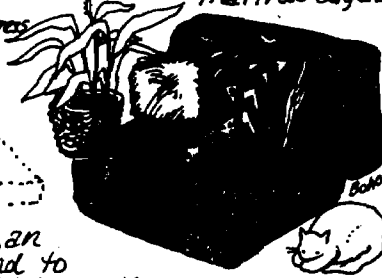


3. Sew on a strap of suede or leather, an old belt, or strong elastic band to edge of mattress cover. Make sure it is secure.

4. Fold up side B as shown.



5. Fold up side A as shown and secure other side of strap to mattress edge B.



Your own sofa!

The Open End

An on-going column which will use your solutions to solve problems. Your responses are more than welcome—they're what keep the "open" from being "the end."

As principal of a large northern high school, you *still* have a headache! Last time you had to figure out a way to cut your use of fuel by 15 percent. The best idea seemed to be to hold school for only four days a week, and extend the year further into the summer. But problems with faculty contracts, family vacation plans, graduation etc. convinced you that that solution was too drastic for so late in the year.

You decided instead to eliminate all free periods, reschedule classes and dismiss school at 2:00 p.m. rather than 3:00 p.m. It wasn't easy to make sure that every student got in the gym, driver ed and health courses needed for graduation—but somehow you made it.

But now you have just received the sixth phone call of the day from an angry parent. Without study halls, parents are concerned that students bring home too much work—and the fact that they have an extra hour during the day to do it still doesn't seem to stop the kids from waiting until Johnny Carson says good night to start doing

their homework—and parents are afraid they are working too hard.

Teachers miss their open periods—there is no time during the day to run dittos, see students outside the class, get to the library to put books on reserve, or order equipment from A-V. Teachers have their own energy crisis, and since many of them have formed car pools, they can't stay after school to run these errands—so students are suffering from less well prepared classes.

And the store owners of the neighborhood are not very happy with you, either. They are complaining that your students go to the stores and hang around, not really causing trouble, but not buying anything. Your job is to keep kids off the streets—or so you keep hearing.

How can you solve all these problems and still keep down your use of fuel? Write us your solutions and we'll let you know what happens next in the open end.

Our thanks to students from Lanett, Alabama and Lynn, Massachusetts from whose letters we drew this month's solution.